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Hazardous Child Labor in United States Tobacco Farming
A 15-year-old girl works on a tobacco farm in North Carolina. July 2013. 2013 Human Rights Watch

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Children working on tobacco farms in the United States are exposed to nicotine, toxic pesticides, and other dangers. Child tobacco workers often labor 50 or 60 hours a week in extreme heat, use dangerous tools and machinery, lift heavy loads, and climb into the rafters of barns several stories tall, risking serious injuries and falls. The tobacco grown on US farms is purchased by the largest tobacco companies in the world.

Ninety percent of tobacco grown in the US is cultivated in four states: North Carolina, Kentucky, Tennessee, and Virginia. Between May and October 2013, Human Rights Watch interviewed 141 child tobacco workers, ages 7 to 17, who worked in these states in 2012 or 2013. Nearly three-quarters of the children interviewed by Human Rights Watch reported the sudden onset of serious symptoms including nausea, vomiting, loss of appetite, headaches, dizziness, skin rashes, difficulty breathing, and irritation to their eyes and mouthswhile working in fields of tobacco plants and in barns with dried tobacco leaves and tobacco dust. Many of these symptoms are consistent with acute nicotine poisoning.

Based on our findings set out in this report, Human Rights Watch believes that no child under age 18 should be permitted to perform work in which they come into direct contact with tobacco in any form, including plants of any size or dried tobacco leaves, due to the inherent health risks posed by nicotine and the pesticides applied to the crop. The US government, US Congress, and tobacco manufacturing and tobacco leaf supply companies should all take urgent steps to progressively remove children from such tasks in tobacco farming.

In the US, it is illegal for children under 18 to buy cigarettes or other tobacco products. However, US law fails to recognize the risks to children of working in tobacco farming. It also does not provide the same protections to children working in agriculture as it does to children working in all other sectors. In agriculture, children as young as 12 can legally work for hire for unlimited hours outside of school on a tobacco farm of any size with parental permission, and employers may hire children younger than 12 to work on small farms with written parental consent. Outside of agriculture, the employment of children under 14 is prohibited, and even 14 and 15-year-olds can only work in certain jobs for a limited number of hours each day.

Tobacco farmed in the US enters the supply chains of at least eight major manufacturers of tobacco products who either purchase tobacco through direct contracts with tobacco growers or through tobacco leaf supply companies. These include Altria Group, British American Tobacco, China National Tobacco, Imperial Tobacco Group, Japan Tobacco Group, Lorillard, Philip Morris International, and Reynolds American. Some of these companies manufacture the most popular brands of cigarettes sold in the US, including *Marlboro*, *Newport*, *Camel*, and *Pall Mall*. All companies that purchase tobacco in the US directly or indirectly have responsibilities to ensure protection of children from hazardous labor, including on tobacco farms, in their supply chains in the US and globally.

Child tobacco workers interviewed by Human Rights Watch for this report typically described beginning to work on tobacco farms at age 13, often together with their parents and older siblings. Only very few worked on family farms. The children we interviewed were mostly the sons and daughters of Hispanic immigrants, though they themselves were frequently US citizens. Regardless of employment or immigration status, the children described working in tobacco to help support their families basic needs or to buy essential items such as clothing, shoes, and school supplies. For example, 15-year-old Grace S. told Human Rights Watch why she decided to start working in tobacco farming in North Carolina: I just wanted to help out my mom, help her with the money.

Most children interviewed by Human Rights Watch were seasonal workers who resided in states where tobacco was grown and worked on farms near their homes or in neighboring areas, primarily or exclusively during the summer months when tobacco is cultivated. We also spoke to several children who migrated to and within the United States by themselves or with their families to work in tobacco and other crops. There is no comprehensive estimate of the number of child farmworkers in the US.

Tobacco is a labor-intensive crop, and the children interviewed described participating in a range of tasks, including: planting seedlings, weeding, topping tobacco to remove flowers, removing nuisance leaves (called suckers), applying pesticides, harvesting tobacco leaves by hand or with machines, cutting tobacco plants with tobacco knives and loading them onto wooden sticks with sharp metal points, lifting sticks with several tobacco plants, hanging up and taking down sticks with tobacco plants in curing barns, and stripping and sorting dried tobacco leaves.

Children interviewed by Human Rights Watch in North Carolina, Kentucky, Tennessee, and Virginia frequently described feeling seriously, acutely sick, while working in tobacco farming. For example, Carla P., 16, works for hire on tobacco farms in Kentucky with her parents and her younger sister. She told Human Rights Watch she got sick while pulling the tops off tobacco plants: I didnt feel well, but I still kept working. I started throwing up. I was throwing up for like 10 minutes, just what I ate. I took a break for a few hours, and then I went back to work. Emilio R., a 16-year-old seasonal worker in eastern North Carolina, who plans to study to be an engineer, said he had headaches that sometimes lasted up to two days while working in tobacco: With the headaches, it was hard to do anything at all. I didnt want to move my head.

Many of the symptoms reported by child tobacco workers are consistent with acute nicotine poisoning, known as Green Tobacco Sickness, an occupational health risk specific to tobacco farming that occurs when workers absorb nicotine through their skin while having prolonged contact with tobacco plants. Public health research has found dizziness, headaches, nausea, and vomiting are the most common symptoms of acute nicotine poisoning. Though the long-term effects of nicotine absorption through the skin are unknown, public health research on smoking indicates that nicotine exposure during adolescence may have long-term adverse consequences for brain development. Public health research indicates that non-smoking adult tobacco workers have similar levels of nicotine in their bodies as smokers in the general population.

In addition, many children told Human Rights Watch that they saw tractors spraying pesticides in the fields in which they were working or in adjacent fields. They often described being able to smell or feel the chemical spray as it drifted over them, and reported burning eyes, burning noses, itchy skin, nausea, vomiting, dizziness, shortness of breath, redness and swelling of their mouths, and headache after coming into contact with pesticides. Yanamaria W., 14, who worked on tobacco farms in central Kentucky in 2013 with her parents and 13-year-old brother, told Human Rights Watch, I was in the field when they started spraying. I can stand the heat for a long time, but when they spray, then I start to feel woozy and tired. Sometimes it looks like everything is spinning.

While pesticide exposure is harmful for farmworkers of all ages, children are uniquely vulnerable to the adverse effects of toxic

exposures as their bodies are still developing, and they consume more water and food, and breathe more air, pound for pound, than adults. Tobacco production involves application of a range of chemicals at different stages in the growth process, and several pesticides commonly used during tobacco farming are known neurotoxins. According to public health experts and research, long-term and chronic health effects of pesticide exposure include respiratory problems, cancer, neurologic deficits, and reproductive health problems.

Children also said that they used sharp tools, operated heavy machinery, and climbed to significant heights in barns while working on tobacco farms. Several children reported sustaining injuries, including cuts and puncture wounds, from working with tools. For example, Andrew N., 16, described an accident he had while harvesting tobacco in Tennessee two years earlier: My first day, I cut myself [on the leg] with the hatchet. I probably hit a vein or something because it wouldnt stop bleeding and I had to go to the hospital. They stitched it. My foot was all covered in blood.

Many children described straining their backs and taxing their muscles while lifting heavy loads and performing repetitive motions, including working bent over at the waist, twisting their wrists to top tobacco plants, crawling on hands and knees, or reaching above their heads for extended periods of time. Bridget F., 15, injured her back in 2013 while lifting sticks of harvested tobacco up to other workers in a barn in northeastern Kentucky: Im short, so I had to reach up, and I was reaching up and the tobacco plant bent over, and I went to catch it, and I twisted my back the wrong way. According to public health research, the impacts of repetitive strain injuries may be long-lasting and result in chronic pain and arthritis.

Federal data on fatal occupational injuries indicate that agriculture is the most dangerous industry open to young workers. In 2012, two-thirds of children under the age of 18 who died from occupational injuries were agricultural workers, and there were more than 1,800 nonfatal injuries to children under 18 working on US farms.

Nearly all children interviewed by Human Rights Watch said that their employers did not provide health education, safety training, or personal protective equipment to help them minimize their exposure to nicotine from tobacco leaves or pesticides sprayed in the fields and on the plants. Children typically used gloves, which they or their parents bought, and large black plastic garbage bags, which they brought from home, to wear as protection from wet tobacco leaves and rain. The experience of Fabiana H., a 14-year-old tobacco worker in North Carolina, was typical among the children interviewed by Human Rights Watch:

Several children reported working in bare feet or socks when the mud in the fields was deep and they lacked appropriate footwear.

Some children reported that, despite long days working outside in the heat, employers did not provide them with drinking water, and most said that they had limited or no access to toilets, hand-washing facilities, and shade. Working long hours in high temperatures can place children at risk of heat stroke and dehydration, particularly if they do not drink enough water, do not have access to shade, and are wearing extra clothes to protect themselves from sunburn and exposure to nicotine and pesticides.

Most children interviewed by Human Rights Watch described working long hours, typically between 10 and 12 hours per day, and sometimes up to 16 hours. Most employers allowed children two or three breaks per day, while some children told Human Rights Watch that employers did not allow workers to take regular breaks, even when children felt sick or were working in high heat. Martin S., 18, told Human Rights Watch that his employer on a Kentucky farm where he worked in 2012 did not give them regular breaks during the work day: We start at 6 a.m. and we leave at 6 p.m. We only get one five-minute break each day. And a half hour for lunch. Sometimes less. Many children told Human Rights Watch that some employers pressured them to work as quickly as possible. Some said that they chose to work long hours or up to six or seven days a week in order to maximize their earnings. In other cases employers demanded excessive working hours, particularly during the peak growing and harvest periods of the season.

Children described utter exhaustion after working long hours on tobacco farms. Elan T., 15, and Madeline T., 16, worked together on a tobacco farm after migrating to North Carolina from Mexico with their mother and younger brother. They explained the fatigue they felt after working for 12 or 13 hours in tobacco fields: Just exhaustion. You feel like you have no strength, like you cant eat. I felt that way when we worked so much. Sometimes our arms and legs would ache. Patrick W., 9, described similar feelings after working long hours with his father, a hired tobacco worker, in Tennessee in 2013. I feel really exhausted, he said. I come in [to the house], I get my [clean] clothes, I take a shower, and then its usually dark, so I go to sleep.

Most children reported earning the federal minimum wage of \$7.25 per hour for their work on tobacco farms, though some children were paid a fixed rate during certain parts of the season based on the quantity of tobacco they harvested or hung in barns. Some children reported problems with wages including earning less than minimum wage for hourly work, deductions by the contractor or grower for drinking water or for reasons that were not explained to them, or because of what they believed was inaccurate recording of hours by labor contractors.

Most children interviewed by Human Rights Watch attended school full time and worked in tobacco farming only during the summer months, after school, and on weekends. However, a few children who had migrated to the United States for work and had not settled in a specific community told Human Rights Watch that they did not enroll in school at all or enrolled in school but missed several months in order to perform agricultural work, including in tobacco farming. Some children stated that they occasionally missed school to work in times of financial hardship for their families.

In recognition of the potential benefits of some forms of work, international law does not prohibit children from working. The International Labour Organizations (ILO) Worst Forms of Child Labor Convention, which the US has ratified, obligates countries to prohibit certain types of work for children under age 18 as a matter of urgency, including work that is likely to jeopardize childrens physical or mental health, safety or morals (also known as hazardous labor). The ILO leaves it up to governments to determine which occupations are hazardous to childrens health. Several countries, including major tobacco producing countries such as Brazil and India, prohibit children under 18 from performing work in tobacco farming. Based on our field research, interviews with health professionals, and analysis of the public health literature, Human Rights Watch has concluded that no child under age 18 should be permitted to perform any tasks in which they will come into direct contact with tobacco plants of any size or dried tobacco leaves, due to the health risks posed by nicotine, the pesticides applied to the crop, and the particular health risks to children whose bodies and brains are still developing.

The ILO Worst Forms of Child Labor Recommendation states that certain types of work in an unhealthy environment may be appropriate for children ages 16 and older on the condition that the health, safety and morals of the children concerned are fully protected, and that the children have received adequate specific instruction or vocational training in the relevant branch of activity. Because exposure to tobacco in any form is unsafe, Human Rights Watch has determined, based on our field investigations and other research, that as a practical matter there is no way for children under 18 to work safely on US tobacco farms when they have direct contact with tobacco plants of any size or dried tobacco leaves, even if wearing protective equipment. Though protective equipment may help mitigate exposure to nicotine and pesticide residues, rain suits and watertight gloves would not completely eliminate absorption of toxins through the skin and would greatly increase childrens risk of suffering heat-related illnesses. Such problems documented by Human Rights Watch in the US seem likely to extend to tobacco farms outside the United States.

US laws and policies fail to account for the unique hazards to childrens health and safety posed by coming into direct contact with tobacco plants of any size and dried tobacco leaves. The Fair Labor Standards Act (FLSA) prohibits children under the age of 16 from engaging in agricultural work that the US Secretary of Labor has identified as hazardous. However, the US Department of Labors (DOL) regulations on hazardous occupations do not include any restrictions for any children over age 12 to perform work that exposes them to contact with tobacco plants and tobacco leaves.

In addition, US law regulating all child work in agriculture fails to adequately protect children in a sector determined by the ILO to be one of the most dangerous sectors open to children for work. US law permits children to work in agriculture at younger ages, for longer hours, and in more hazardous conditions than children working in all other sectors.

Under US law, there is no minimum age for a child to begin working on a small farm with parental permission. At age 12, a child can work for any number of hours outside of school on a farm of any size with parental permission, and at age 14, a child can work on any farm without parental permission. In other sectors, in contrast, employment of children under age 14 is prohibited, and children ages 14 and 15 may work only in certain jobs and for limited hours outside of school. For example, a child working in a fast food restaurant may only work 18 hours a week when school is in session, while children working in agriculture may work 50 or more hours per week with no restrictions on how early or late they work, as long as it is not during school hours.

At age 16, children working in agriculture can work in jobs deemed to be particularly hazardous, including operating certain heavy machinery or working at heights. However, all other working children must be 18 to perform hazardous work. For example, in agriculture, children under 16 can work at heights of up to 20 feet (over one story) without any fall protection, and 16 and 17-year-olds can work at any height without protection. By contrast, in construction, employers must ensure fall protections for any work taking place over six feet (two meters).

Although the US government has the primary responsibility to respect, protect, and fulfill human rights under international law, private entities, including businesses, also have internationally recognized responsibilities regarding human rights, including workers rights and childrens rights. All businesses should have policies and procedures in place to ensure human rights are respected and not abused, to undertake adequate due diligence to identify and effectively mitigate human rights problems, and to adequately respond in cases where problems arise.

In preparation of this report, Human Rights Watch sought to engage 10 companies that source tobacco from the states we visited. Eight of those companies manufacture tobacco products (Altria Group, British American Tobacco, China National Tobacco, Imperial Tobacco Group, Japan Tobacco Group, Lorillard, Philip Morris International, and Reynolds American), and two are leaf merchant companies (Alliance One International and Universal Corporation). Human Rights Watch sought to understand these companies policies concerning child labor and other labor rights in their supply chains, as well as mechanisms for implementing and monitoring these policies. Over the course of several months before the release of this report, Human Rights Watch sent letters to each of these companies detailing the preliminary findings of our research and recommendations and requesting meetings with company officials.

Nine companies responded to Human Rights Watch and stated that they took steps to prohibit child labor in their supply chains. Only China National Tobacco did not respond to Human Rights Watchs letter or repeated attempts to secure a meeting with company executives.

All of the tobacco manufacturing companies and leaf supply merchants that replied to Human Rights Watch expressed concerns about child labor in their supply chain. Only a few of the companies have explicit child labor policies in place. The approaches to child labor in the supply chain varied from company to company, as detailed below. Human Rights Watch correspondence with these companies is included in an appendix to this report, available on the Human Rights Watch website.

Of the companies approached by Human Rights Watch, Philip Morris International (PMI) has developed the most detailed and protective set of policies and procedures, including training and policy guidance on child labor and other labor issues which it is implementing in its global supply chain. PMI has also developed specific lists of hazardous tasks that children under 18 are prohibited from doing on tobacco farms, which include most tasks in which children come into prolonged contact with mature tobacco leaves, among other hazardous work.

Several companies stated that in their US operations they required tobacco growers with whom they contract to comply with US law, including laws on child labor, which, as noted above, do not afford sufficient protections for children. These companies stated that their policies for tobacco purchasing in countries outside of the US were consistent with international law, including with regard to a minimum age of 15 for entry into work under the ILO Minimum Age Convention, with the exception of certain light work, and a prohibition on hazardous work for children under 18, unless national laws afford greater protections. However, most companies did not specify the tasks that they consider to constitute hazardous work. Under these standards, children working in tobacco farming can remain vulnerable to serious health hazards and risks associated with contact with tobacco plants and tobacco leaves. A number of companies stated that they had undertaken internal and third party monitoring of their supply chains to examine labor conditions, including the use of child labor, as defined within the scope of their existing policies.

For the last decade, several members of the US Congress have repeatedly introduced draft legislation that would apply the same protections to children working in agriculture that already protect children working in all other industries. However, Congress has yet to

enact legislation amending the Fair Labor Standards Act to better protect child farmworkers, and federal agencies have not made necessary regulatory changes to address the specific risks tobacco farming poses to children. In 2012, DOL withdrew proposed regulations that would have updated the decades-old list of hazardous occupations prohibited for children under age 16 working in agriculture. These regulations, had they been implemented, would have prohibited children under age 16 from working in tobacco. At this writing, the US Environmental Protection Agency (EPA) is accepting comments on long-awaited changes to the Worker Protection Standard, a set of safety regulations related to occupational pesticide exposure. It remains to be seen whether the revised regulations will include better protections for child workers.

US laws and policies governing child labor in tobacco are inconsistent with or in violation of international conventions on the rights of children. The US government should acknowledge the particular health and safety risks posed to children exposed to tobacco plants and tobacco leaves, and take immediate action to end all hazardous child labor among children under age 18 on tobacco farms. It should also ensure that laws regulating child labor guarantee that the protections afforded to children working in other sectors, including those concerning working hours, work with sharp objects, machinery, heavy loads, and the like, apply to children working in agriculture as well.

Companies should create child labor policies or amend existing policies to state explicitly that all work in which children come into contact with all tobacco plants and tobacco leaves is hazardous and prohibited for children under 18. Each company should establish effective internal and third-party monitoring of this policy and other relevant labor policies. Given that the international tobacco leaf purchasing markets, including that of the US, often involve third-party suppliers or multiple company contracts with individual growers, members of the industry should seek to formulate industry-wide policies prohibiting hazardous child labor on tobacco farms as well as effective monitoring mechanisms. Companies should also support efforts to provide viable alternatives to working in tobacco farming, including programs to provide children in tobacco communities with education and vocational training.

This report is based on interviews with 141 children ages 7 to 17 who said they had worked in tobacco farming in the United States in 2012 or 2013. During multiple field research trips between May and October 2013, Human Rights Watch interviewed 80 children in North Carolina, 46 in Kentucky, 12 in Tennessee, and 3 in Virginia. Eight children worked for less than a full week on tobacco farms. A few of the very youngest children4 out of 141worked with their parents sporadically and without pay. The median age of the children we interviewed was 15; the median age at which they began working in tobacco was 13. All personal accounts reported here, unless otherwise noted, reflect experiences children had while they were working on tobacco farms in 2012 or 2013.

Children interviewed were identified with the assistance of individuals and organizations providing legal, health, educational, and social services to farmworkers, farm labor contractors, and through outreach by Human Rights Watch researchers in farmworker communities.

In addition, Human Rights Watch interviewed three young people ages 18 to 21 who had worked in tobacco as children, and seven parents of child tobacco workers. Human Rights Watch researchers also conducted interviews with 36 experts, including representatives of farmworker organizations, lawyers, social services providers, healthcare providers, and academic researchers in tobacco-growing regions in the US. In total, 187 people were interviewed for this report.

To supplement formal interviews, researchers spoke with more than 50 outreach workers, educators, doctors, lawyers, tobacco growers, farm labor contractors, and representatives of nongovernmental organizations (NGOs) across the US in person and on the telephone. We also spoke with more than 60 adult tobacco workers in the course of our research.

Two Human Rights Watch researchers, one of whom is fluent in Spanish, conducted the interviews. Interviews were conducted in English or Spanish, at the interviewees preference. Most interviews were conducted individually, though some children were interviewed in small groups of two to five participants. No interviews were conducted in the presence of workers employers, such as farm labor contractors or tobacco growers.

Interviews took place in a variety of settings including homes, worksites, schools, restaurants and other public spaces, outdoors as part of outreach in farmworker communities, and at religious institutions. Whenever possible, researchers held interviews in private. In a few cases, interviewees preferred to have a family member or another person present. Interviews were semi-structured and addressed conditions for children working in US tobacco farming, including health, safety, wages, hours, training, and education.

All children and parents interviewed were informed of the purpose of the interview, its voluntary nature, and the ways in which the information would be collected and used. For interviews taking place during mealtimes, Human Rights Watch provided food to interviewees. Human Rights Watch did not provide anyone with compensation in exchange for an interview. Individuals were informed that they could end the interview at any time or decline to answer any questions without any negative consequences. Participants provided oral informed consent to participate and were assured anonymity. All names of children and parents interviewed have been changed to protect their privacy, confidentiality, and safety. Some individuals approached declined to be interviewed.

Human Rights Watch also analyzed relevant laws and policies and conducted a review of secondary sources. Detailed state-by-state analysis of applicable labor laws, the enforcement of such laws, litigation, and recent and pending legislative projects in North Carolina, Kentucky, Virginia, and Tennessee was undertaken with pro bono assistance from a law firm based in New York City.

Human Rights Watch researchers obtained relevant US federal statistics and other information through public record requests to the National Institute for Occupational Safety and Health (NIOSH) within the US Centers for Disease Control and Prevention (CDC), the US Department of Labor (DOL), the US Department of Agriculture (USDA), and the US Environmental Protection Agency (EPA).

Between December 2013 and March 2014, Human Rights Watch sent letters to eight companies that manufacture tobacco products (Altria Group, British American Tobacco, China National Tobacco, Imperial Tobacco Group, Japan Tobacco Group, Lorillard, Philip Morris International, and Reynolds American) and two leaf merchant companies (Alliance One and Universal Corporation) detailing the preliminary findings of our research and requesting meetings with company officials. Nine companies responded in writing. The results of this correspondence are detailed in the relevant sections of this report, and copies of the correspondence can be found in the appendix, available on the Human Rights Watch website. In addition, company officials from several companies met or spoke by phone with Human Rights Watch in 2014.

In this report, child and children are used to refer to anyone under the age of 18, consistent with usage under international law.

The term child labor, consistent with International Labor Organization standards, is used to refer to work performed by children below the minimum age of employment or children under age 18 engaged in hazardous work.

The term migrant worker can have various meanings and many farmworkers in the US were, at least at some point in their lives, international migrants. In this report the term migrant is used for workers who travel within the US for agricultural work, as distinguished from seasonal workers, defined in this report as settled workers based in one place.

Tobacco has been cultivated in the United States for centuries, and commercial tobacco production has been a central part of the North American agricultural economy since the 1600s.[1] According to the Food and Agriculture Organization of the United Nations, in 2012, the US was the fourth largest producer of unmanufactured tobacco, behind China, Brazil, and India.[2] The total value of tobacco leaf production in the US in 2012 was approximately US\$1.5 billion.[3]

Tobacco is grown in at least 10 US states, but North Carolina, Kentucky, Virginia, and Tennessee account for almost 90 percent of domestic tobacco production. Roughly 50 percent of all US-produced tobacco is grown in North Carolina, 25 percent in Kentucky, and 7 percent in each of Virginia and Tennessee. [4] In 2007, the last year for which there is relevant data, there were 8,113 tobacco farms in Kentucky, 2,622 farms in North Carolina, 1,610 farms in Tennessee, and 895 farms in Virginia. [5]

Tobacco growers contract with different types of buyers through agreements to produce specific amounts of tobacco at set prices. Contracts often include specific provisions about the type and quality of tobacco produced, and standards for production.[6] Many growers contract directly with manufacturers of cigarettes and other tobacco products.[7] Growers also enter into contracts with leaf tobacco merchant companies, which do not manufacture tobacco products, but buy, process, pack, and ship unmanufactured tobacco to commercial product manufacturers.[8] Some growers also have contracts with cooperative organizations in states that were previously involved in administering now-obsolete federal price support programs, such as the US Tobacco Cooperative. These organizations process and sell tobacco to cigarette manufacturers, and some also produce consumer tobacco products for US markets.[9]

In 2004, the Fair and Equitable Tobacco Reform Act ended longstanding federal tobacco quota and price support programs designed to control supply and guarantee a minimum price for US tobacco. [10] The law also established the Tobacco Transition Payment Program (TTPP), known as the tobacco buy-out, to help tobacco quota holders and producers transition to the free market by providing annual payments for 10 years (2005-2014). [11] The TTPP contributed to contractions in US tobacco farming and production previously underway. By the late 1990s, demand for US tobacco had declined sharply in domestic and foreign markets due to strong competition from international tobacco producers and declines in US consumption of tobacco products. [12] From 1997 to 2007, the number of US farms producing tobacco decreased by 83 percent, [13] with volume down by 57 percent from 1997 to 2012. [14]

Following the tobacco buyout, many small farmers left tobacco and transitioned to alternative crops, while larger farms expanded and consolidated operations. [15] According to a 2010 study by the Center for Tobacco Grower Research, a Tennessee-based organization researching tobacco production, economics, and markets, following the tobacco buyout, average acreage per tobacco farm in the US tripled. [16] The study found that as farm size increased, so did the reliance on hired farm labor relative to unpaid family labor. [17]

There are several varieties of tobacco grown in the United States, distinguished and defined by both the characteristics of the leaves and the manner in which they are harvested and cured. [18] The most common types of tobacco produced in the US are flue-cured and burley tobacco. Tobacco is a labor-intensive crop, and even with the use of labor-saving technologies for some production, flue-cured tobacco requires approximately 100 hours of labor per acre, and burley tobacco requires 150 to 200 hours of labor per acre. [19]

The tobacco season generally begins in February or March with cultivation of tobacco seedlings in greenhouses or plant beds. Farmers and workers plant seeds in trays and tend to them for nearly two monthswatering, fertilizing, and clipping the plants several times, often with mowers suspended over the plants, to keep them uniform in size. In April or May, the seedlings are transplanted into fields. During planting, workers sit facing backwards on a tractor-pulled transplanter or setter. As the tractor moves through the field, workers load seedlings into slots in a rotating wheel, and the wheel inserts each seedling into a small hole in the ground. Other workers walk behind the setter to straighten and adjust the plants by hand to ensure proper planting.

As the tobacco plants grow, workers dig up weeds with sharp hoes and uproot and reposition plants where two tobacco stalks have taken root. By June or July, workers begin topping (breaking off large flowers that sprout at the tops of tobacco plants) and removing suckers (nuisance leaves that reduce the yield and quality of tobacco). This process is done entirely by hand and helps to produce larger and more robust tobacco plants. Farmers and workers apply pesticides and growth regulators to tobacco plants at various points in the season (see below for detailed information on pesticides used in tobacco farming). After workers have finished topping, tobacco plants are left to mature in fields until they are ready to be harvested and dried in a process called curing.

Flue-cured tobacco is a broad leaf type of tobacco grown in North Carolina and other parts of the southeastern US. In 2012, nearly 80 percent of US flue-cured tobacco was grown in North Carolina.[20] Flue-cured tobacco is harvested by removing the leaves in a process called priming, which involves a series of separate harvests beginning with the lowest leaves and moving up the stalk. The harvest is done primarily by machine, though some workers harvest leaves by hand by pulling tobacco leaves off of the stalks and gathering them under their arms before loading them into trucks to be transported to barns for curing.

Workers then place harvested leaves into racks or cages and load them into heated curing barns. Leaves are left in curing barns for one to two weeks, with heat and ventilation carefully controlled, until leaves are dried and ready to be sorted and packed into bales. Workers help to sort leaves and place them in cages where they are compressed into bales with heavy machines called balers. The flue-cured tobacco crop is typically harvested and cured from mid-July to early October.

Burley tobacco is a variety of tobacco grown in Kentucky, Tennessee, and other states in the Appalachian US. In 2012, Kentucky produced 74 percent of the US burley tobacco crop.[21] Burley tobacco is harvested by the stalk, and the harvest is done primarily by hand in a difficult, labor-intensive process. Workers cut each tobacco plant at the base of the stalk with a small axe or hatchet (often called a tobacco knife) and then slide them onto wooden sticks equipped with sharp spikes at the end. Workers place six tobacco plants

on each stick and leave the sticks in the field to dry for one or two days. Workers then load the sticks of harvested tobacco plants onto flatbed wagons to be transported to barns for curing.

Burley tobacco is dried in open-air barns, without any added heat, in a process called air-curing. To arrange the tobacco for curing, workers climb into the rafters of barns, forming several tiers or levels, and pass sticks of harvested burley tobacco upward to hang it in the barns to dry. Harvested burley tobacco plants dry in curing barns (or sometimes in makeshift field curing structures) for four to eight weeks, when workers take the sticks of tobacco down from the barns and strip the leaves off of the stalks by hand. Workers sort and grade tobacco manually, based on the physical qualities of the leaves (e.g. stalk position, color). The tobacco is then packaged into bales for market. The burley tobacco crop is harvested and cured later typically from mid-August to early December.

The National Institute for Occupational Safety and Health (NIOSH) estimates that hundreds of thousands of children under age 18 work in US agriculture each year, but there is no comprehensive estimate of the number of child farmworkers in the US. In 2012, farm operators reported directly hiring 130,232 children under age 18 to work on crop and livestock farms, and an additional 388,084 children worked on the farms on which they resided. [22] However, these figures significantly underrepresent the total number of children working in agriculture as they exclude children hired by farm labor contractors or employed informally. [23] The total number of children who work on tobacco farms each year is also unknown. [24]

The children interviewed by Human Rights Watch for this report were overwhelmingly of Hispanic ethnicity. Many children we interviewed were US citizens, consistent with the findings of a 2013 pilot study of North Carolina child farmworkers in which 78 percent were US citizens. [25] Other children we interviewed were born outside of the United States and had migrated from other countries with their families, or in some instances, by themselves. Regardless of the immigration status of children, the parents of most children interviewed for this report were living in the US without authorization. Child tobacco workers interviewed by Human Rights Watch described working in a diversity of circumstances. The vast majority worked for hire, employed by official or unofficial farm labor contractors, labor subcontractors, or tobacco growers. A small number of children that we interviewed worked on farms owned by family members. Most of the children who stated that they worked on family farms also worked for hire on farms owned by other tobacco growers.

Most children interviewed by Human Rights Watch resided in states where tobacco was grown and worked on farms near their homes. These children overwhelmingly attend public school full time in their communities, often working primarily, or exclusively, during the summer months. The median age at which children we interviewed began working in tobacco was 13. Some of these children worked together with their parents and siblings; others worked without their parents, sometimes with crews composed almost entirely of children. Many seasonal child farmworkers in North Carolina told Human Rights Watch that they worked in tobacco as well as other crops including, variously, sweet potatoes, blueberries, cucumbers, and watermelons.

Human Rights Watch also interviewed 16 child migrant workers who move within the United States to work in different agricultural crops, including tobacco. Some of these children said that they travel with their families and attend schools in different states, working only during the summers, after school, and on weekends. Other migrant children stated that they work year round and do not attend school, as described below.

Several children interviewed who had migrated without authorization to the US with their families reported that they had applied for or received deferred action through a federal program designed to provide temporary reprieve from deportation and employment authorization to individuals under age 30 who migrated to the US as children, attended school, have continuously resided in the US for a minimum of five years, and met several other eligibility criteria. [26] Human Rights Watch has argued that deferred action for childhood arrivals, by considering a persons positive attachments to the country of residence in deportation decisions, represents a rational, if incremental, shift in US immigration policy. [27] Human Rights Watch has called on the US government to enact more permanent and comprehensive immigration reforms. [28]

Nearly all of the children interviewed by Human Rights Watch, whether seasonal or migrant, citizens or unauthorized, reported that they worked in tobacco to provide for themselves and their families. The National Agricultural Workers Survey, a random survey of crop workers in the US, indicates that farmworkers are overwhelmingly poor: in 2008-2009, the median annual income among US crop workers was \$18,750.[29] A 2008 report from the US Department of Agriculture found poverty among farmworkers is more than double that of all wage and salary employees in the United States.[30] Most children interviewed by Human Rights Watch for this report started working in tobacco farming, and in some cases in other crops as well, to earn money for their basic needs: clothes, shoes, school supplies. Parents of child workers said that their childrens minimum wage earnings helped to supplement meager family incomes.

Gabriella G., 42, is a mother of six, and five of her children have worked in tobacco fields in North Carolina. She moved to North Carolina after leaving an abusive partner and is now a single mother. When asked why her children started working in tobacco, she said, What I earn is not sufficient for my family. My children have to work to buy school supplies, clothes, the things you have to pay for at school.[31] Her daughter Natalie G., 18, started working in tobacco at age 12. She told Human Rights Watch why she started working: I saw what my mom was going through, how tired she was, and we wanted to help. There was motivation to work because my mom was working and we were alone without her. And seeing my mom come beaten down, sunburned, tired. We were raised not to leave someone behind.[32] Natalies younger sister, Elena G., also started working in tobacco at age 12. She told Human Rights Watch how she used her earnings: I would give my mom more than half of my check for the bills. And then I would help her buy food. And whatever I had left, Id buy my little brother something. I wanted to buy clothes, but I didnt really have the chance to.[33]

Other children described similar reasons for working in tobacco. Raul D., a 13-year-old worker in eastern North Carolina, told Human Rights Watch, I work so that I have money to buy clothes for school and school supplies, you know, like crayons and stuff. Ive already bought my backpack for next year.[34] Adriana F., 14, works for hire on tobacco farms in Kentucky with her parents and her four brothers. When asked how she used her earnings, she told Human Rights Watch, I use the money for school supplies and to go on field trips. Jerardo S., 11, told Human Rights Watch he started working on tobacco farms in Kentucky to save for his college education, saying, I told my mom I would save it for the college or university where I want to go.[35]

In addition to economic need, children, particularly those living in the US without authorization, reported working in tobacco because they lacked other employment and summer educational opportunities in their rural communities. Blanca A., like many farmworker

children, was born in Mexico and works without authorization, even though she has lived in the United States for many years. Most of my friends have jobs in the new sports shop, at McDonalds or Bojangles, in the mall selling stuff, she told Human Rights Watch. But usually for those jobs they ask for [your] social security [number].[36] Claudio G., a 16-year-old unauthorized worker in North Carolina, told Human Rights Watch, Tobacco is the only job we [unauthorized children] have during the summer.[37]

Other children said that they were too young to be hired to work other jobs. Alan F., a 15-year-old worker in eastern North Carolina who hopes to attend college after graduating from high school, told Human Rights Watch that he would continue working in tobacco until he was older. Theres plenty of jobs, but I mean, I aint got the age, he said. If I was older, Id want to be a mechanic or work in construction or something like that. [38]

Of the nine children interviewed by Human Rights Watch who worked on tobacco farms owned by family members, most had other career aspirations. For example, 15-year-old Bradley S., who started working on tobacco farms owned by his father and grandfather in eastern Kentucky at 8, told Human Rights Watch, When I grow up, I want to be an engineer.[39]

Nearly three-quarters of children interviewed by Human Rights Watch in North Carolina, Kentucky, Tennessee, and Virginia, 97 out of 133, reported feeling sickwith nausea, vomiting, loss of appetite, headaches, dizziness, skin rashes, difficulty breathing, and irritation to their eyes and mouthswhile working in fields with tobacco plants and in barns with dried tobacco leaves and tobacco dust. [40] Many reported being exposed to pesticides and to extreme temperatures and unrelenting heat while working in tobacco fields. Some stated that they used sharp tools and cut themselves, or operated heavy machinery and climbed to significant heights, risking serious injury. Many children described straining their backs and taxing their muscles while lifting heavy loads and performing repetitive motions, including working bent over at the waist, twisting their wrists to top tobacco plants, crawling on hands and knees, or reaching above their heads for extended periods of time.

Nearly all children interviewed by Human Rights Watch said that their employers did not provide health education, safety training, or personal protective equipment to help them minimize their exposure to nicotine from tobacco leaves or pesticides sprayed in the fields and on the plants. Some children reported that, despite long days working outside in the heat, employers did not provide them with drinking water, and most said that they had limited or no access to toilets, hand-washing facilities, and shade.

Based on our field research, interviews with health professionals, and analysis of public health literature, Human Rights Watch has concluded that no child under age 18 should be permitted to perform any tasks in which they will come into direct contact with tobacco plants of any size or dried tobacco leaves, due to the health risks posed by nicotine, the pesticides applied to the crop, and the particular health risks to children whose bodies and brains are still developing. Though protective equipment may help mitigate exposure to nicotine and pesticide residues, rain suits and watertight gloves would not completely eliminate absorption of toxins through the skin and would greatly increase childrens risk of suffering heat-related illnesses. As a result, Human Rights Watch has determined that there is no practical way for children to work safely in the US when handling or coming into contact with tobacco in any form.

More than two out of three children interviewed by Human Rights Watch said that they had felt suddenly, acutely ill while working in fields of tobacco plants and performing such jobs as topping, pulling off suckers, weeding, straightening plants, harvesting tobacco, and while working in curing barns. Children interviewed by Human Rights Watch described working, especially in wet conditions during or after rainfall or in the morning with a heavy dew on the tobacco leavesand becoming severely nauseous, dizzy or lightheaded. Some children said that they also vomited while working. Other children said they suffered severe headaches, and after a days work with tobacco, felt a sustained loss of appetite and energy, or had difficulty sleeping.

Children in all four states described nausea, vomiting, and loss of appetite while working on tobacco farms. For example, Elena G., a 13-year-old seasonal worker living in eastern North Carolina, spent both the 2012 and 2013 summers working in tobacco with her mother. She told Human Rights Watch how she felt while topping tobacco:

Elenas mother, Gabriella G. described her daughters condition: Sometimes I saw that she couldnt bear it. She was going to faint. She had headaches, nausea. Watching her was so hard. Shes skinny now, but imagine: she was even skinnier then [when she was working]. She was losing weight. [42]

Yolanda F., a 16-year-old seasonal worker in eastern North Carolina, started working on tobacco farms in 2013 with two of her friends during their summer break from school. She described how she felt during her first days on the job: My first day I felt dizzy. I felt like I was going to throw up, but I didnt. I just started seeing different colors.I didnt last through lunch that day.[43]

Child tobacco workers in Kentucky, Tennessee, and Virginia often experienced nausea and vomiting while cutting stalks of burley tobacco during the harvest. For example, Danielle S., 16, told Human Rights Watch that she has been working for hire with her parents and brother on tobacco farms outside of Lexington, Kentucky for several years during the summers, after school, and on weekends. Danielle said that she got sick while harvesting tobacco in 2013: It happens when youre out in the sun. You want to throw up. And you drink water because youre so thirsty, but the water makes you feel worse. You throw up right there when youre cutting, but you just keep cutting. [44] Her brother, age 15, described feeling sick while working in tobacco at a younger age: A couple of years ago, I was throwing up in the field. I took medicine, and then I went back to work. [45]

Ten-year-old Marta W. and her brother Patrick W., 9, worked together with their father in 2013 on tobacco farms in Tennessee, about 60 miles northeast of Nashville. Several different tobacco growers hire their father to harvest tobacco plants and hang them on sticks to dry in barns. Because he is paid a fixed rate for each stick of tobacco plants he harvests and hangs in a barn, Marta and Patrick work with him to increase his earnings. Patrick told Human Rights Watch about his experience harvesting burley tobacco in 2013: Ive gotten sick. We started cutting [tobacco plants], and I had to go home. I kept on coughing [heaving], and I had to eat crackers and drink some Gatorade. I threw up a little bit. It took two or three hours before I felt better. Marta, also describing working in 2013, added, I felt sick when I went, but I didnt actually throw up because I stayed out of the barn. I felt kind of nauseous. My head felt bad. [46] Jaime V., 18, said that he felt nauseated while working in the curing barns. He told Human Rights Watch, I worked all the way at the top of the barn, too. Its just hot up there. The air is humid and the smell [of tobacco] fills your nose and mouth, and you get sick. [47]

Children told Human Rights Watch that they suffered from headaches, dizziness, and lightheadedness while working on tobacco farms.

Emilio R., a 16-year-old seasonal worker who hopes to study to be an engineer, said that in addition to topping and pulling suckers off tobacco plants, he harvested flue-cured tobacco leaves by hand on farms in eastern North Carolina in 2012. He described that process: We grab the [tobacco] leaves, put them under our arm until we have a bundle, then throw them in the truck. [48] Emilio also said he had headaches that sometimes lasted up to two days during the 2012 season: With the headaches, it was hard to do anything at all. I didnt want to move my head. [49] His 17-year-old sister, Jocelyn, also harvested tobacco leaves by hand, and she also said she had headaches while working: I would get headaches sometimes all day. I think it was from the smell of the tobacco. I really didnt like it. [50]

Miguel T., 12, a seasonal worker in eastern North Carolina, said that in July 2013 during his first month working in tobacco fields, he got a headache while topping tobacco: I got a headache before. It was horrible. It felt like there was something in my head trying to eat it.[51]

Cameron M., 18, and his brother Leonardo M., 15, migrated to central Kentucky from Guatemala with their father in the winter of 2013. They worked together for several months on tobacco farms, stripping dried tobacco leaves off of sticks after they had cured in barns. Both boys reported headaches and dizziness while stripping dried tobacco leaves off of sticks. Leonardo M. told Human Rights Watch, I felt like I was spinning in circles, and my head ached. I felt awful.[52] Pablo E., a 17-year-old worker in Kentucky described dizziness as a symptom of the work.[53] Jacob S., a 14-year-old tobacco worker in Virginia, described similar symptoms: I get a little bit queasy, and I get lightheaded and dizzy. Sometimes I feel like I might pass out. It just feels like I want to fall over.[54]

Some children described recurrent sleeplessness. Jaime V., 18, started working in tobacco in Tennessee when he was 14 after migrating to the United States with his cousin. At first, he did not enroll in school, instead working full-time for a contractor doing agricultural work. Describing his first summer working in tobacco four years ago, he told Human Rights Watch, I got sick. I couldnt sleep at night. I felt dizzy. [55] Luciano P., 18, worked on tobacco farms in Kentucky: When I got sick, when I tried to go to sleep, I couldnt go to sleep. I was feeling tired, but I couldnt sleep. Sometimes you throw up. I had headaches. [56]

Taken together, the symptoms reported to Human Rights Watch by child tobacco workers in North Carolina, Kentucky, Tennessee, and Virginia are consistent with acute nicotine poisoning, known as Green Tobacco Sickness, an occupational health risk specific to tobacco farming. Green Tobacco Sickness occurs when workers absorb nicotine through their skin while having prolonged contact with tobacco plants.[57] Researchers have documented dizziness, headaches, nausea, and vomiting as the most common symptoms of acute nicotine poisoning.[58] In some cases, these symptoms may be linked to or exacerbated by pesticide exposure or working in conditions of high heat and high humidity without sufficient rest, shade, and hydration.[59]

Acute nicotine poisoning generally lasts between a few hours and a few days, [60] and although it is rarely life-threatening, severe cases may result in dehydration which requires emergency treatment. [61] Children are particularly vulnerable to nicotine poisoning because of their size, and because they are less likely than adults to have developed a tolerance to nicotine. [62] The long-term effects of nicotine absorption through the skin have not been studied, [63] although the long-term effects of consuming tobacco products containing nicotine has been well documented.

Working in wet, humid conditions increases the risk of poisoning as nicotine dissolves in the moisture on the leaf and is more readily absorbed through the skin. A public health study conducted in North Carolina collected dew samples from tobacco plants on four farms and found nicotine in all samples, ranging from 33 to 84 micrograms per milliliter of dew. [64] The researchers estimated that on humid days, farmworkers could be exposed to 600 milliliters or more of dew, containing between 20 and 50 milligrams of nicotine. [65] However, the percentage of nicotine in dew that is absorbed through the skin is not known. A 2007 review of public health studies found that non-smoking adult tobacco workers have similar levels of nicotine in their bodies as smokers in the general population, althoughindividual variation would be expected based upon the use of personal protective equipment, season and contact with tobacco, and abrasions on the skin, as well as other factors. [66] Working in excessive heat and engaging in heavy physical activity, which are typical for workers, including child workers, engaged in tobacco farming in the United States, also increase the risk of nicotine poisoning as the increase in surface blood flow to help reduce body temperature facilitates nicotine absorption. [67]

Though public health research has most often looked at nicotine poisoning among adult workers handling mature tobacco leaves, nicotine is present in tobacco plants and leaves in any form. According to Dr. Thomas Arcury, director of the Center for Worker Health at Wake Forest School of Medicine, Nicotine is part of the plant. The tobacco plant, by its nature, contains nicotine from the time its a seedling to the end. [68] As a result, added Arcury, any task that requires the handling of tobacco in any form may expose workers to nicotine. [69]

Nicotine may affect human health in distinct ways depending on how it enters the bodywhether absorbed through the skin, inhaled, or ingested. [70] Though the long-term effects of nicotine absorption through the skin are unknown, public health research on smoking indicates that nicotine exposure during childhood may have long-lasting consequences. According to the US Surgeon Generals most recent report, The evidence is suggestive that nicotine exposure during adolescence, a critical window for brain development, may have lasting adverse consequences for brain development. [71]

Children interviewed by Human Rights Watch reported skin conditions, difficulty breathing, sneezing, and eye, nose, mouth, and throat irritation while working on tobacco farms.

Some children reported itchy or burning skin or skin rashes while working in tobacco farming, particularly while topping and suckering. Children often noted that their skin irritations were worse when they were working in wet clothing or without gloves, particularly if working in those conditions for extended periods of time.

Diego T. and Rafa B., both 16, who worked together on tobacco farms in eastern North Carolina in the summer of 2013, told Human Rights Watch that they suffered from skin problems while working in tobacco. Diego said, Your skin gets irritated. It burns, sometimes when you get wet, you get rashes. Like when you cut the flower, and touch your skin, it stings and burns.[72] Rafa had a similar observation: When you wipe your face, it burns. Or if you scratch yourself.[73] Joshua D., 13, also worked in eastern North Carolina in 2013: You cant wipe your face when youre working because it burns. It feels like fire ants on your forehead.[74]

Some children also reported skin rashes. Ive had red bumps all over my arm, said Sally G., 16, who worked in North Carolina for the first time in the summer of 2013. They are very itchy. I used to roll up my sleeves when it got hot but then I started to get bumps on my

arms. [75] Jocelyn R., a 17-year-old worker who worked in tobacco in North Carolina in 2012, said: Id get a rash on my hands [while topping tobacco], it would last until the next day. It was itchy. [76] Estevan O., 15, worked in tobacco in the 2012 season said, Id have itching hands and feet. Its wet. Your socks and gloves get wet. Your skin starts itching and cracking. The cracking would really hurt. [77]

Public health research has shown a high prevalence of skin conditions among farmworkers. [78] A 2007 study of tobacco workers found that they may be particularly susceptible to skin conditions as both the tobacco leaf itself and pesticides used in tobacco cultivation have been identified as possible causes of contact dermatitis, an inflammatory skin disease. [79] Human Rights Watch could not determine the exact cause of the skin irritations or rashes reported by child tobacco workers.

Some children interviewed by Human Rights Watch said that they experienced respiratory and allergic symptoms while topping and harvesting tobacco in fields, or hanging tobacco to dry in curing barns.

For example, Erica P., age 16, described topping tobacco in Eastern North Carolina in July 2013: There is no air in the rows. Its really hard to breathe. [80] Alberto H., 16, who plays on his high schools soccer team in southeastern Kentucky, told Human Rights Watch that he has trouble breathing while hanging tobacco in barns: When youre at the top of the barn, you cant breathe up there. Its probably because [there is] a bunch of dust and its hard to breathe, and I have asthma. I always bring my inhaler. [81] Dario A., also a 16-year-old worker in Kentucky, said, The hardest part of the job is climbing up high in the barn. Its hard to breathe up there. [82]

Some child tobacco workers also reported respiratory and allergic symptoms while working with dried tobacco. Sixteen-year-old Timothy Y. works for his parents, grandparents, and neighbors on tobacco farms in Kentucky. He told Human Rights Watch, I dont like to do the stripping because it messes with my allergies and makes it hard to breathe. [83] Joaquin F., 16, started stripping tobacco in barns at age 12 in Kentucky and continued to work for hire after school and on weekends until he got a job at local restaurant at age 16. Describing the work he did in curing barns in 2012, he told Human Rights Watch, When I was stripping, all the dust from the tobacco would get to my lungs and get stuck in my nose. You just feel sick. [84]

A 2011 study on the prevalence of respiratory and allergic symptoms among non-smoking farmworkers in eastern North Carolina found nearly one-quarter reported wheezing at times, with elevated odds of wheezing for individuals working in tobacco production. [85] Public health research among adult workers has also shown that workers exposed to tobacco dust during curing and baling showed significantly lower lung function than unexposed workers. [86]

Some child tobacco workers told Human Rights Watch that liquid from wet tobacco plants would splash into their eyes or mouths while they were working in the fields, causing pain, itching, or other irritation. Children often described working in fields where tobacco plants reached above their heads, and they may have been particularly vulnerable to these effects due to their small size relative to the plants. Sally G., a 16-year-old seasonal tobacco worker described topping tobacco plants taller than her in wet fields in eastern North Carolina during the summer of 2013: Ive felt the spray on my face. It splashes from the plants. It really hurts when it gets in your eyes. They tell us to try to keep our faces covered up. Water from the flowers gets on your face, and when its mixed with the pesticide, it burns. [87]

Estevan O., 15, told Human Rights Watch that he started working on tobacco farms in North Carolina at age 11 because, My family needed me to. He described working in wet tobacco fields during the 2012 season: The water on the leaves would splash in my eyes [when I was topping]. My eyes would get irritated. Id have to take my contacts out and wear glasses. [88] While describing his work harvesting tobacco in Tennessee in 2013, Patrick W., 9, said, Sometimes if it gets to your eyes, it will sting a little bit, like burn. [89]

Several children interviewed in Kentucky said pieces of tobacco leaves would fall into their eyes or mouth while lifting sticks with tobacco plants to be hung in barns causing irritation, pain, and a sour taste in their mouths. Andrea D., 16, works for hire for a tobacco grower in central Kentucky together with her mother. She lifts sticks of harvested tobacco to other workers who hang the sticks in the rafters of curing barns. While describing her work in the barns in 2012, she said, It gets all over you. It gets all in your mouth and in your nose. Its just sour. The leaves and the dust get in your nose, and it itches. And it gets in your ears. You have a bitter taste in your mouth. It goes away the next day, but then you do it again, and it comes back.[90] Henry F., a 17-year-old tobacco worker in Kentucky, told Human Rights Watch that lifting sticks of tobacco irritated his eyes while he was working in 2012: If youre at the bottom you have to lift it up. And when you lift it up the tobacco goes in your mouth and eyes. And when it goes in your eyes, it makes your eyes reddish and pinkish.[91]

Just over half of the children interviewed by Human Rights Watch63 out of 120reported that they saw tractors spraying pesticides in the fields in which they were working or in fields adjacent to the ones in which they were working. [92] These children often reported being able to smell or feel the chemical spray as it drifted towards them. A few children stated that they applied pesticides to tobacco plants with a handheld sprayer and backpack, or operated tractors that were spraying pesticides on tobacco fields. [93] Children also reported experiencing a range of symptoms after coming into contact with pesticides while working in tobacco farming, including burning eyes, burning nose, itchy skin, nausea, vomiting, dizziness, shortness of breath, redness and swelling of the mouth, and headaches. Exposure to pesticides can have serious short-term and long-term health effects.

Many children interviewed by Human Rights Watch described being exposed to pesticides, most often through drift, when a pesticide applied in one area spreads to adjoining areas through wind. [94] Many stated that they felt drift from tractors spraying in adjacent fields; in a few cases they said that tractors sprayed pesticides in the fields in which they were working.

For example, Jocelyn R., 17, started working on tobacco farms in eastern North Carolina at 14, along with her younger brother. Describing an incident that occurred during the summer of 2012, she told Human Rights Watch:

Cameron M., an 18-year-old worker in Kentucky, described seeing a tractor spraying in the tobacco field in which he was working: One time I saw a tractor spraying chemicals on the field. It made the workers upset. There was a strong smell. We all covered our mouths and noses. [96]

Children also reported being taken to work in fields that had been sprayed very recently with pesticides. I went back into a field after they sprayed it, like *right* after they sprayed it, said 16-year-old Andrew N., a 10th grade student in Tennessee who works with a crew of tobacco workers led by his stepfather. He described the incident to Human Rights Watch,

Similarly, Emilio R., 16, told Human Rights Watch that he reentered a tobacco field in North Carolina minutes after the grower had applied pesticides. We were working in one field and finished half of the field and then the farmer decided to spray [pesticides using a tractor], he said. It [the drift] was about to catch up to us and so we stepped out of the field. We waited a few minutes and went back in.[98]

Children interviewed by Human Rights Watch said they experienced a range of symptoms after coming into contact with pesticide spray including burning eyes, burning noses, itchy skin, nausea, vomiting, dizziness, shortness of breath, redness and swelling of their mouths, and headaches. For example, 17-year-old Lucia A., interviewed by Human Rights Watch on the day of her junior prom in a small North Carolina town, said:

Jimena C., 15, spends her summers living with her godmother so that she can work on tobacco farms in a county about 30 miles from her hometown in North Carolina. She told Human Rights Watch that she got very ill at age 14 after working in a field sprayed with pesticides only a few hours earlier: I got so sick one time after they sprayed. It was just a few hours after they sprayed and we went in. I got really dizzy. And I saw black. I sat down and threw up several times. [100] Marta W., 10, felt ill after a tractor sprayed pesticides while she and her younger brother were helping their father, a hired farmworker, on a tobacco farm in northern Tennessee in the summer of 2013. They were like spraying it to make it grow bigger the time we went, she said. It was in the same field as us. It was on the other side of the field. The smell was very nasty. I felt nauseous after that. [101]

Yanamaria W., 14, who started working on tobacco farms in 2012, spent two summers working for a farm labor contractor in central Kentucky together with her parents and 13-year-old brother. Yanamaria told Human Rights Watch about being exposed to pesticides sprayed from a tractor in the summer of 2013. I was in the field when they started spraying, she said. I can stand the heat for a long time, but when they spray, then I start to feel woozy and tired. Sometimes it looks like everything is spinning. You cant focus on your task.[102]

Nicholas V., an 8th grader, told Human Rights Watch that he works for hire in tobacco fields in North Carolina with his mother during his summer break. He described a pesticide drift from spraying in an adjacent field while he was working in 2012:

Yael A., a 17-year-old seasonal worker in North Carolina, said, When they spray, the smell is very strong. And it causes a terrible smell, a really bad smell, and sometimes you feel itchy, tingly, in your mouth and your nose. It itches. Your mouth gets red and puffy.[104]

Marissa G., 14, first worked on tobacco farms in North Carolina in the 2013 season, together with her older sister. She said that working in tobacco triggered her asthma symptoms, particularly when she was exposed to pesticides: The spray affects my asthma. When I smell it, it makes me nauseous, short of breath, even if Im not really doing anything. [105]

Five children interviewed by Human Rights Watch said that they applied pesticides to tobacco plants with a handheld sprayer and backpack, or operated tractors that were spraying pesticides on tobacco fields. Christian V., age 13, explained that he uses a backpack sprayer to apply pesticides to his familys tobacco fields in Tennessee: We spray it with chemicals for worms and so it can help it grow. I use a backpack. Theres like a cap on the top, and you twist it open and put water in it and all the chemicals, then you throw it on your back and you walk and you get this thing and you squirt it on top of the plants.[106] Theo D., 16, described how he felt one day in the summer of 2013 after using a backpack sprayer to apply an insecticide to tobacco fields on a Virginia farm where he worked: I got home and felt dizzy and started puking, but I took a cold shower and got over it.[107]

Pesticides enter the human body when they are inhaled, ingested, or absorbed through the skin. According to a review of public health studies of farmworkers, pesticide exposure is associated with acute health problems including nausea, dizziness, vomiting, headaches, abdominal pain, and skin and eye problems. [108] Exposure to large doses of pesticides can have severe health effects including spontaneous abortion and birth deformities, loss of consciousness, coma, and death. [109] Long-term and chronic health effects of pesticide exposure include respiratory problems, cancer, depression, neurologic deficits, and reproductive health problems. [110] Children are uniquely vulnerable to the adverse effects of toxic exposures as their brains and bodies are still developing, and they consume more water and food, and breathe more air, pound for pound, than adults. [111]

The US Environmental Protection Agency (EPA) estimates that 10,000 to 20,000 *physician-diagnosed* pesticide poisonings occur each year among US agricultural workers. [112] One public health study found that 64 percent of acute occupational pesticide-related illnesses reported by children occurred among children working in agriculture, and this number represents only a small fraction of actual pesticide poisonings as many cases are never reported. [113]

The EPA has established federal regulations called the Worker Protection Standard, which require labeling of pesticides, notification of workers about pesticide application, safe application of pesticides, access to emergency medical assistance, and the provision of decontamination supplies, pesticide safety training and safety posters, and personal protective equipment. [114] The EPAs Worker Protection Standard does not specify a minimum age for children to mix and apply pesticides, but regulations set by the US Department of Labor (DOL) under the Fair Labor Standards Act prohibit children under 16 from handling pesticides belonging to the two most toxic categories, as determined by the EPA. [115] In addition, the EPA sets restricted entry intervals (REIs) specifying the amount of time after pesticide application that workers should not enter the fields without wearing protective equipment. [116] REIs vary depending on the toxicity of the pesticide, the type of crop, and the method of application, and may last from a few hours to a few days. [117] However, public health studies have shown that, even if workers are kept out of the area for the legally required time period, pesticides are still present in the fields at lower levels. [118] Furthermore, federal regulations make no special considerations for children, and the EPA determines restricted entry intervals using a 154-pound (70-kilogram) adult body as a model. [119]

In February 2014, the EPA proposed changes to the agricultural Worker Protection Standard. Among other protections, the proposed changes would require more frequent training for workers and pesticide handlers, mandate posting of warning signs after applications of certain pesticides, and establish a minimum age of 16 for all pesticide handlers. [120]

Tobacco production in the United States involves application of a range of chemicals at different stages in the growth process including chemical fertilizers, pesticides, and growth regulators (growth inhibitors and ripening agents). [121] Several pesticides commonly used during tobacco farming belong to two chemical classes, organophosphates and carbamates, both of which are neurotoxins. [122] The US

Government Accountability Office explains that pesticides in these classes, act on the nervous system to prevent the normal flow of nerve impulses to muscles that control both voluntary movement, such as walking, and involuntary movement, such as breathing and heart beat. [123]

While pesticides are applied to many crops cultivated in the United States, tobacco workers may be at especially high risk for pesticide exposure given the nature of work. Child tobacco workers interviewed by Human Rights Watch reported topping and harvesting tobacco in fields where they were surrounded by tall plants and had extensive contact with leaves that may have been treated with pesticides. Jobs where workers directly handle pesticide-treated plants can increase exposure, particularly in the absence of effective protective gear and hand-washing. [124]

Relatively few studies have examined pesticide exposure specifically in tobacco workers. [125] Following a request for data from Human Rights Watch, the National Institute for Occupational Safety and Health (NIOSH) indicated that there are no comprehensive federal statistics on the incidence of pesticide poisoning among tobacco farmworkers specifically. [126] Public health research in eastern North Carolina found high levels of biomarkers for pesticides in the bodies of adult farmworkers who had worked extensively in tobacco. [127]

All children interviewed by Human Rights Watch for this report stated that they often worked in high temperatures and high humidity typical for the summer months in North Carolina, Kentucky, Tennessee, and Virginia. Average high temperatures in July and August in many of the counties where children reported working range from 88 to 92 degrees Fahrenheit (31 to 33 Centigrade), often with high humidity. [128] Many children said that they felt faint or dizzy or suffered from headaches when working in very high temperatures. Many stated that they were expected to work without additional breaks in such conditions.

Yael A., 17, has been working for hire on tobacco farms in North Carolina since she was 14. You feel like you cant breathe when its really hot, she said. [129] Andrea D., a 16-year-old seasonal worker, told Human Rights Watch about her experience working on a tobacco farm in Kentucky during the summer months: When the sun is really beating hot, really hot, I would get like dizzy. I had to stop a minute. Especially when were taking out the weeds because thats in the middle of June, and its hot. I never passed out, but I felt dizzy. [130] Timothy S., age 13, has worked for hire with his father on tobacco farms in Kentucky since he was 12: It was really hard to focus on work when its really hot. Youre just thinking about When are we going to be done? The plants are about my size. Its hot when youre in the rows. I felt like my skin was burning. [131]

Joseph T., an 18-year-old tobacco worker, described an incident in 2011 when he was working in a tobacco field in eastern North Carolina. He said:

Working long hours in high temperatures can place children at risk of heat stroke and dehydration, particularly if there is not enough drinking water and they are wearing extra clothes to protect from sunburn and exposure to nicotine and pesticides. Children are more susceptible than adults to heat illness.[133]

Some children interviewed by Human Rights Watch stated that they used axes or hatchets to cut burley tobacco during the harvest, sharp spikes to spear burley tobacco plants, and hoes to remove weeds from tobacco fields. Some children said that they sustained cuts and puncture wounds from working with these sharp tools. A few said they operated or worked in close proximity to dangerous machinery, including mowers used to trim tobacco plants, tractors used to harvest tobacco leaves, and balers used to compress leaves into bales. In Kentucky, Human Rights Watch interviewed a few children who drove tractors while working on tobacco farms. Some reported injuries related to operating or being near heavy machinery. Human Rights Watch also interviewed children who said that they regularly climbed into the rafters of barns several stories tall to hang sticks of harvested burley tobacco to dry.

Several children reported cutting themselves with tobacco knives, as the axes used to chop down stalks of burley tobacco are known. Andrew N., 16, described an accident he had while harvesting tobacco in Tennessee in 2011: My first day, I cut myself with the hatchet [on the leg]. It wasnt bad. I probably hit a vein or something because it wouldnt stop bleeding and I had to go to the hospital. They stitched it. I only had to get two stitches [M]y shoe was just soaked in blood. [134] Lucio F., 10, helps his parents and four older siblings while they work for hire on tobacco farms in Kentucky. Lucio reported cutting himself with a tobacco knife during the burley tobacco harvest in 2013: I got hurt once when I got the axe, and I got cut somewhere on my feet. I was swinging at the plant and I missed and hit my leg. [135]

Children told Human Rights Watch that they had spiked or speared their hands or other body parts on sharp spikes while placing cut burley tobacco plants on long sticks that hold the plants for curing. Omar B., 15, works for several tobacco growers in Tennessee along with a few friends. Like many children who harvest burley tobacco, he described placing a sharp spike on the end of a wooden stick; piercing the stalks of the tobacco plants with the spike; sliding six plants onto each stick, and repeating the process down multiple rows of tobacco plants. Omar told Human Rights Watch that he punctured his lip in 2013 when removing the spike from one wooden stick to transfer it to the next stick: Thats the most dangerous part of it.I spiked my lip pulling [the spike] off the stick once. I came back with it, and it stabbed me in the lip. It just went through. [136]

Adriana F., 14, and her brother Jeremiah F., 15, both said that they had spiked their hands while working in the burley tobacco harvest in Kentucky in 2012. Adriana spiked her hand while working in the rain:

Her brother described a similar incident:

Theo D., 16, who plays football for his high school team, cut his finger in a similar manner while harvesting tobacco in Virginia in 2012: I speared myself like onceI was holding the spear, and I missed, and it went into my finger. [139]

Children also described using hoes and machetes to remove weeds from tobacco fields. Nicholas V., a 14-year-old worker in eastern North Carolina, worked for hire in the 2012 season: We used machetes to take down weeds. It was really tough though. We had to swing it hard. It was too hard to take out the weeds otherwise. They told me to be very cautious. I wore [my own] soccer shin guards to protect myself. [140] Andrea D., 16, has worked for a tobacco grower in Kentucky with her parents and her siblings since she was 6. She told Human Rights Watch that she cut herself with a hoe while removing weeds from a tobacco field in 2013: When I was using the hoe, I cut myself on my leg with the blade of the hoe. I didnt need to go to the hospital. I just kept working. I was bleeding, but I was in the middle

of the field and I couldnt do anything.[141]

Federal regulations fail to protect children from working the sharp tools used in tobacco farming. DOLs hazardous occupations orders lack any restrictions on the use of knives, hoes, and other sharp hand tools for children working in agriculture. The regulations prohibit children under 16 from operating power-driven circular, band, or chain saws, but in all other industries children must be at least 18 to use these saws.[142]

A few children said they operated or worked in close proximity to dangerous machinery, including mowers used to trim tobacco plants, tractors used to harvest tobacco leaves, and balers used to compress leaves into bales. In Kentucky, Human Rights Watch interviewed a few children who drove tractors while working in tobacco. Some children said that they sustained injuries while operating or working near heavy machinery.

At age 17, Isaac S., who migrated to the US to work with his brother on a tobacco farm, sustained a serious injury while working with a mower used to trim tobacco seedlings before they were planted in the ground. The mower was rigged out of a typical push lawnmower suspended in the air from a metal stand. Workers were expected to push trays of seedlings on rollers under the machine while the machine was running in order to trim the plants. Isaac described the accident: [M]y hand got stuck [in the mower], and it cut off two of my fingersI was pushing the plant, but I dont know how the wheel slipped. It went really fast, and I couldnt stop it, and it took my two fingersI wasnt crying or anything. I just held my hand. I was pressing really hard because there was blood coming out.[143] Isaac explained that his employer had told him to continue working during light rain, which he believed contributed to his accident: We were trying to wait out the rain, and the boss didnt like it that we were not working. So he told us to hurry up and get working. So we were working in the rain when I got hurt.[144]

Isaac underwent surgery immediately after the accident, but doctors were unable to reattach the severed fingers. He still struggles with pain in his hand and his fingers, and he is unable to perform many tasks required for agricultural work. He said, I dont work comfortably. In my hand, I dont have strength. Only in [the lower] half of the hand I have strength. 145 In the state where Isaac worked, employers are not required to provide seasonal or migrant farmworkers with workers compensation insurance. 146 Isaac said his employer offered him \$100 in compensation to cover his medical bills and account for lost wages due to his accident.

Emilio R., 16, started working on tobacco farms in North Carolina at age 13 during his summer breaks from school. He told Human Rights Watch that he was injured when his leg got trapped in a baler while he was packing dried tobacco leaves into boxes in North Carolina in 2012:

Carla P., 16, works for hire with her parents and her younger sister on tobacco farms in Kentucky. She told Human Rights Watch that she fell off of a tractor-pulled, moving wagon while hauling sticks of wet tobacco plants in 2012: I fell once. I was on a wagon, and I was taking the tobacco off so they could put it in a little room so they could strip it off. It was really wet, and I fell onto rocks. That was when I was 15. I landed on my back. I got a bruise and a migraine. I didnt go to the doctor. [149]

Federal regulations do not adequately protect child farmworkers from dangerous machinery. Children under 16 are prohibited from operating or assisting to operate some machines, but the list of machines that are off-limits to children under 16 is not comprehensive. At age 16, children working in agriculture can legally drive tractors of over 20 horsepower take-off and operate heavy machinery such as forklifts and certain mowing and baling machines. [150]

Human Rights Watch interviewed child workers who climbed into the rafters of barns to hang sticks with several stalks of harvested burley tobacco to dry, and to remove sticks of dried tobacco. They described climbing to heights in barns that were at least two stories high using ladders or by climbing the rafters. Crews of child and adult workers would form several tiers to pass sticks of tobacco upward or downward. While engaging in this work, children straddled planks that were sometimes positioned two or three feet apart and often found it difficult to balance.

Pablo E., 17, migrated to Kentucky from Guatemala by himself in December 2012. He described his experience removing sticks of dried tobacco from curing barns in central Kentucky in the winter of 2013: I had to climb up and down in the barn. It was cold. When youre at the top, you have your legs open and youre standing on two wooden planks. You take a stick out of the roof and pass it down.[151] Similarly, Calvin R., 17, migrated to Kentucky from Mexico alone at age 13 to work with a crew of agricultural workers. Calvin is the youngest worker in the group, and his crew migrates between several states in the US, working in different crops. Describing his work on tobacco farms near Lexington, Kentucky in 2013, he told Human Rights Watch, Its hard to keep your balance when youre up high in the barn and the tobacco is heavy.[152] Jaime V., 18, described a similar experience working in curing barns in Tennessee in 2013: When youre in the middle of the barn, you have to open your feet. And there are two planks, and you have to grab the sticks from below and pass them up.[153]

Human Rights Watch did not speak with any children who had fallen while working at heights in barns. However, several children told Human Rights Watch that they had seen family members or other workers fall. Marta W., a 10-year-old worker in Tennessee, described seeing another worker fall while she herself was standing in the rafters of a barn in 2013: Its hard to balance. You have to stand on these stakes. And one of these guys, he fell and hurt his back the time I went. So then my dad got me down [from the rafters].[154] Agustin F., 15, travels to Kentucky from Florida every year to work for hire on tobacco farms. He started working in tobacco together with his father at age 10. He told Human Rights Watch, In the barn, I go way up high. Sometimes people fall. Last year my father fell. Ive never fallen. I always check the barn to make sure the rails are good. Other people dont check the rails before they go up.[155]

Human Rights Watch researchers saw a beam collapse in a barn in northern Kentucky shortly after a crew of workers had finished hanging a wagon load of tobacco. The crew had moved to the other side of the barn before the beam fell, so no one was injured, but workers had been standing on planks supported by the beam less than an hour before the collapse.

The Occupational Safety and Health Administration (OSHA) requires employers in many industries to provide fall protection measures for workers such as guard rails and safety training. For example, OSHA requires employers to provide fall protection in shipyards when workers are expected to work at heights of five feet, and on construction sites when workers are at heights of six feet. [156] Agricultural operations are excluded from OSHAs fall protection standards. [157] The hazardous occupations orders established by DOL prohibit

child farmworkers under the age of 16 from working at heights of over 20 feet, but they can work without any fall protection at heights less than 20 feet, which nevertheless includes heights of over one story. Children over 16 are allowed to work at any height without any protections.[158]

Federal data on fatal occupational injuries indicate that agriculture is the most dangerous industry open to young workers. According to DOL, agriculture has the highest fatal occupational injury rate of any industry. In 2012, 28 children under the age of 18 died from occupational injuries; two-thirds were agricultural workers. Of 19 occupational fatalities of children under the age of 16, nearly three-quarters were in agriculture. [159] Child occupational deaths in agriculture were most often caused by driving trucks and farm vehicles or operating farm machinery. [160] In addition to the 28 fatal injuries, there were more than 1,800 nonfatal injuries to children under 18 working on US farms in 2012. [161]

According to the National Institute for Occupational Safety and Health (NIOSH), the factors putting children at high risk for work-related injuries include: biologic and psychosocial contributors such as inadequate fit, strength, and cognitive abilities to perform certain tasks, [162] rapidly growing organ and musculoskeletal systems, which may make them more likely to be harmed by exposure to hazardous substances or to develop cumulative trauma disorders, and less experience, training, and knowledge about how to work safely, what their rights are, and what they are not legally allowed to do.[163]

Children interviewed by Human Rights Watch described performing prolonged repetitive motions for extended periods of time, including working bent over at the waist, twisting their wrists to top tobacco plants, reaching above their heads, and crawling on hands and knees to remove weeds or uproot one tobacco plant where two had grown together. Children reported muscle soreness, aches, and pain in their backs, shoulders, arms, hands, and fingers after engaging in repetitive motions.

Andrea D., 16, started helping her father, a hired worker, sort dried tobacco leaves and plant seedlings on a tobacco farm in Kentucky at age 6. Now in 11th grade and aspiring to be a doctor, she continues to work for the same grower after school, on weekends, and over the summer performing a range of tobacco farming tasks. She described to Human Rights Watch her work hoeing during the 2013 summer and the impact on her body. After the plant got a foot tall we would take the weeds out with a hoe. It was backbreaking, Andrea D. said. All day, from 8 a.m. to 6 p.m., youre hunched over trying to get all the fields in. At the end of the day, I had bruises on my thumbs and fingers. I was sore in my shoulderswhen youre hunched over all the timewhen youre planting or hoeing or cutting it hurts the mostPlus your fingers, when youre gripping the hoe, they stay curled in, like stuck in place. Your fingers stay like that for a while.[164]

Fabiana H., 14, reported back pain while weeding in tobacco fields in eastern North Carolina in 2012: To me, the hardest part was going down to pull the things [weeds] around the tobacco. You have to bend over all the time. And then when you finish doing a whole row and when you stand up your back is hurting really bad.[165]

Children also described the difficulty of reaching up to top tobacco plants that had grown tall, and some children experienced soreness from extending their arms upward repeatedly. For example, 12-year-old Manuel W. worked with his parents and five siblings on tobacco farms in central Kentucky in 2013. He said, Some [tobacco plants] are taller than six feet tall, and its hard to reach them. Your shoulders and your neck get really tired. It hurts every time you rest your head. [166]

Ian F., 12, and Lazaro S., 15, who worked on different farms in Kentucky, each described the soreness they experienced while cutting burley tobacco during the 2013 harvest. Ian F. works on tobacco farms about 35 miles east of Lexington, Kentucky. He said, My ribs were hurting. And sometimes your back hurts. Your ribs hurt from when you bend down. You get really tired. You get sore. You have to reach over and hold the leaves, and then swing the knife underneath, and you get sore in your ribs and your back. [167] According to Lazaro S., The hardest part is cutting. You have a stick and it has a spear on the end. And you have to cut the tobacco and put it on the stick. You get tired from the sun, and youre bent over all day. You feel sore the next day, but you still have to go back and work again. [168]

Gregory T., 9, and his sister Jackie T., 7, go to tobacco fields with their mother, a hired farmworker in Tennessee. They play in the fields, and they help their mother work, particularly during the burley tobacco harvest when she is paid a piece rate of about 22 cents for each stick of tobacco plants she harvests and hangs in a barn. Describing his work in the summer of 2013, Gregory told Human Rights Watch, Cutting [tobacco plants] is the hardest because theres a big, giant row and you have to go all the way down the row, and come all the way back. Jackie added, You have to take the axe and swing it all the way back. It hurts my arms and right here, she said, pointing to her shoulders.[169]

Human Rights Watch interviewed child workers in Kentucky, Tennessee, and Virginia who reported loading heavy sticks of harvested tobacco plants onto flatbed wagons to be transported to barns for curing. Children in these three states also told Human Rights Watch that they lifted heavy sticks of tobacco plants over their heads to other child or adult workers who would hang the sticks in the rafters of barns for curing. Many children reported fatigue and soreness as a result of lifting heavy loads.

Patrick W., 9, helps his father, a hired tobacco worker, harvest burley tobacco for several growers in northern Tennessee. Patrick said that in 2013, he struggled to lift sticks of cut tobacco onto the truck for transporting: Since Im a kid, I have to focus on picking it up, because its really heavy, and I can only pick up like one at a time. I try to do it really fast. And we just have to work really hard and concentrate. [170] Emily D., 14, had a similar experience loading burley tobacco onto wagons in Virginia in 2013: The hardest part is when you lift it up. You put it on your shoulder, and you lift it up, and put it on the tractor. You get tired. And you get sore. [171]

Bridget F., 15, works for hire on tobacco farms with her mother, who is the crew leader, and her siblings. Bridget injured her back in 2013 while lifting sticks of harvested burley tobacco up to other workers in a barn in northeastern Kentucky: Im short, so I had to reach up, and I was reaching up and the tobacco plant bent over, and I went to catch it, and I twisted my back the wrong way. I went to the doctor, and the doctor said just to ice it. [172] Similarly, Ricardo M., 14, who works on tobacco farms in Kentucky with his mother, told Human Rights Watch about his experience working in 2012: Lifting [the tobacco] is the hardest part because the barn is so tall, so you have to lift the tobacco really high, and the tobacco is really heavy because the plants are big. My arms were hurting. When the plants are wet, they are even heavier, and its harder to carry them and lift them. [173]

Musculoskeletal disorders are usually caused by an accumulation of microtrauma without sufficient time to recover.[174] According to

DOL, musculoskeletal disorders account for nearly one in four nonfatal agricultural occupational illnesses and injuries in the United States among adult and child farmworkers. [175] A 2009 review of studies related to musculoskeletal disorders among farmworkers in the eastern United States found that farmworkers were most affected in the neck, shoulders, and upper extremities. [176] Public health research among farmworkers has found that although treating repetitive motion injuries typically requires rest, as well as anti-inflammatories, splinting, physical therapy, and rehabilitation, farmworkers are under pressure to keep working at the same rate and often lack access to medical care. [177] NIOSH has found that children are especially vulnerable to repetitive motion injuries because their bodies are still developing. [178] According to public health studies of farmers and farmworkers, the impacts of repetitive strain injuries may be long-lasting and result in long-term health consequences including chronic pain and arthritis. [179]

Very few of the children interviewed by Human Rights Watch for this report were given any kind of personal protective equipment by their employers to protect them from nicotine poisoning or pesticide exposure. Instead, they or their parents brought their own, often make-shift, protective supplies. Though protective equipment may help to limit exposure to nicotine and pesticide residues, rain suits and watertight gloves cannot completely eliminate exposure to nicotine from tobacco plants and also significantly increase childrens risk of suffering heat-related illnesses. [180]

Without access to proper water resistant rain gear, many children interviewed by Human Rights Watch covered themselves with black plastic garbage bags while they were topping, pulling suckers, and weeding tobacco plants. Children said that the plastic garbage bags provided some protection from their clothes becoming soaked by water on the tobacco plants from heavy dew or after rain. They said that although the garbage bags offered some protection over the core of their bodies, their arms and legs remained exposed to wet tobacco leaves. Some children also stated that the plastic bags caused them to sweat and overheat and so did not wear anything to protect them from wet tobacco or pesticides.

Fabiana H., 14, who works in tobacco farming during her summer break from school, told Human Rights Watch: I wore plastic bags because our clothes got wet in the morning. I wore them on the bottom and on the top. They put holes in the bags so our hands could go through them. It kept some of my clothes dry, but I still got wet. It was wet, and then the sun comes out and you feel suffocated in the bags. You want to take them off. [181] Nicholas V., 14, described his work on tobacco farms in North Carolina during the summer of 2012: I would wear a big trash bag to cover my clothes. The plants are wet and it gets on your clothes. We put holes in the bag for our head and our arms. It protects the chest, but the plastic is black so it gets really hot. [182]

Some children said they chose not to wear plastic garbage bags because doing so made them overheat, and others described feeling uncomfortable working in the bags. For some of them, this meant working in wet clothing, putting them at particular risk of nicotine poisoning. Santiago H., a 16-year-old seasonal worker in eastern North Carolina, started working in tobacco at age 11. He described working in wet clothing to Human Rights Watch: In the mornings you have to find the tobacco, and its all wet. Your whole body starts itching because youre all wet. Your clothes get wet and you just have to wait for the sun to dry you. [183] Similarly, Adriana F., a 14-year-old who hopes to be a bilingual nurse someday, said she started working after school and on the weekends with her parents and her four brothers on tobacco farms in Kentucky in 2013: Its pretty wet. My clothes get wet. Sometimes I feel like I already took a shower, Im so soaked. [184]

Most children interviewed by Human Rights Watch reported wearing latex or cloth gloves some or most of the time while working in tobacco fields. In most cases, children or their parents bought the gloves. Latex gloves are water resistant, which may help to limit absorption of nicotine through the hands. However, children told Human Rights Watch that, in their experience, latex gloves ripped easily when they topped tobacco plants. They said that cloth work gloves quickly get soaked when working with wet tobacco plants.

Some children told Human Rights Watch that employers told them not to wear gloves. Others stated that the gloves available were too large for their hands or it was difficult for them to perform the work at the pace required while wearing gloves, so they worked without them. The absence of gloves resulted in additional direct exposure to tobacco plants, including wet tobacco plants. Many children said that tobacco plants left a sticky residue on their hands, described in detail below. Some also stated that they suffered from blisters and other wounds when they did not wear gloves. Santiago H., a 16-year-old seasonal worker in eastern North Carolina, described his hands after topping and harvesting tobacco in the 2012 season: I get really bad cuts and blisters on my hands. My hands just start peeling off. [185] Yanamaria W., who speaks English, Spanish, and a Mayan language called Qanjobal, and is studying French and Chinese as an 8th grader, described harvesting burley tobacco in Kentucky in 2013 without gloves: Cutting [tobacco plants] makes sores on our fingers. The handle is made out of wood and you get blisters. They dont provide gloves or anything. We just use our hands. [186]

Some children interviewed by Human Rights Watch also described working without shoes when the mud in tobacco fields was deep because the shoes that they owned impeded their work in difficult conditions, and employers did not provide footwear. Without appropriate protective footwear, children worked barefoot or in socks while working in fields with thick mud, sharp rocks, broken glass, exposed roots, and other hazards. Human Rights Watch observed nearly a dozen children working barefoot or in socks in tobacco fields in North Carolina in July 2013.

Human Rights Watch interviewed 12-year-old Miguel T. while he topped tobacco plants in a field in North Carolina in July 2013 wearing only socks on his feet. Heavy rains had left the field wet, and he did not have boots that could withstand the thick mud. He explained that working in thick mud with his own shoes made him tired and sore because of the extra physical burden. The hardest part is walking [in the mud], he said. My feet start to hurt when I walk. And when I sit down and then I get home and start to walk, my legs start killing me. [187] Raul D., a 13-year-old worker in North Carolina, said, I would go barefoot when it was really muddy. It was squishy, like a Slip and Slide [waterslide]. [188]

According to experts on pesticide exposure, appropriate personal protective equipment to limit pesticide exposure for farmworkers in most fieldwork situations is work clothing that covers the head, body, arms, legs, and feet; that is a hat, a long-sleeve shirt that is closed around the neck, long pants, socks, and closed shoes. [189] However, tobacco workers may be at risk for nicotine poisoning even when wearing this attire if water from tobacco plants saturates clothing. [190] A 2001 study on Green Tobacco Sickness among adult farmworkers found that workers who worked in wet clothing for more than 25 percent of the workday reported twice the incidence of Green Tobacco Sickness as compared to workers who spent less time working in wet clothing. [191] According to Dr. Thomas Arcury of Wake Forest School of Medicine, protective equipment such as rain suits and watertight gloves can reduce a workers contact with wet

tobacco, but may increase the risk of heat stress and heat illness.[192]

Human Rights Watch has concluded the use of personal protective equipment is impractical and insufficient to eliminate the health risks to children of working with tobacco plants or dried tobacco leaves in the US, and may present other unacceptable health risks. This may also be the case in other countries.

Few children interviewed by Human Rights Watch said that they received information from their employers or anyone else about acute nicotine poisoning and how to prevent it. Most did not understand that absorption of nicotine through the skin could have been the cause of many of their symptoms. They also did not know when they were at greatest risk of nicotine poisoning or how to protect themselves while working. For example, 17-year-old Jocelyn R., who worked on tobacco farms in eastern North Carolina in 2012, told Human Rights Watch, All I know about tobacco is that I heard that there is a sickness from it.[193]

Based on their experiences, some children identified that their symptoms, which they referred to in Spanish as *entabacarse*, [194] were linked to working in wet conditions. For example, 18-year-old Emmanuel P., who has worked in tobacco in eastern North Carolina since he was 15, told Human Rights Watch, The hardest part is when youre working and it starts raining. You get wet, and when youre working and sweating and your clothes are wet, you get sick. [195] Jaime V., an 18-year-old tobacco worker in Tennessee, also understood that wet conditions were linked to his symptoms. Describing his work on tobacco farms in 2013, he said, We had to work in the rain. They didnt want us to stop working. Its like everything is wet. And because everything is wet, your clothes get soaked and you get sick. Thats what causes the nausea, the vomiting. [196]

The vast majority of children interviewed by Human Rights Watch said their employers had not provided them with any education or training on pesticide safety. Violet R., 19, started working on tobacco farms in eastern North Carolina at age 12. They didnt tell us anything about the chemicals, she said. Wed be working and the grower would spray the fields next to our field. They didnt move us away. [197] Eighteen-year-old Natalie G., who also started working on tobacco farms in North Carolina at age 12, and continued working in the 2012 and 2013 summers, had a similar observation: I never got any training or materials about pesticides. [198]

In rare cases, children interviewed by Human Rights Watch said their employers had told them that pesticides presented health risks, but did not teach the children how to protect themselves from exposure. Eli B., 15, said that his mother was hospitalized after being exposed to pesticides while working in tobacco in North Carolina: Last year, my mom, she got really sick one time in tobacco because they sprayed that pesticide. She got really dizzy and had to go to the hospital. [199] Eli said that the contractor who employed him told him about pesticides: The contractor said, You have to be careful. The job is not easy. They spray pesticides, poison, it might make you dizzy or make you want to throw up. However, the contractor did not specify any precautions Eli should take to minimize exposure to pesticides. Eli said, No, [the contractor] just said, Be careful. Thats all. [200]

Alberto H., 16, told Human Rights Watch that he drove an all-terrain vehicle with a sprayer attached to the back through tobacco fields in Kentucky while working in 2013. Even though he was given appropriate protective clothing including gloves, plastic safety glasses, and a mask, his safety training was minimal, and he appeared not to remember clearly the instructions. He said, They just told me not to get it on me, be careful with it. Always spray I think they said, against the wind? Like toward where the wind was blowing. [201]

Pesticide training for child workers is especially important because, as one public health study found, Young people are generally less experienced and assertivethan adults, and thus they may not question assignments that place them at risk for pesticide exposure. [202]

Many children interviewed by Human Rights Watch said that their employers did not provide drinking water for workers, and most children stated that employers did not provide handwashing facilities or toilets for workers. Many reported that they did not have a place to shelter in shade during the workday.

Most children interviewed by Human Rights Watch stated that the labor contractor or tobacco grower for whom they worked provided them with water. Alicia K., 15, is a 9th grade student and a seasonal tobacco worker in eastern North Carolina. She described a situation that was common among children interviewed by Human Rights Watch: He [the contractor] gave us lots of water breaks. The contractor had a cooler with water and soda. My mom also carried a cooler with water.[203]

However, some children told Human Rights Watch that the water provided by employers was not clean or drinkable. Nicholas V., a 14-year-old worker in North Carolina said, The manager brought water to the fields, but it tasted strongly of chemicals. I brought my own, or wed go to the gas station nearby. [204] Natalie G. also described problems with the water provided by her employer in North Carolina: They would give us water. It was in a big round orange cooler. But it didnt really taste right, and when we opened the top we saw that there were leaves and dirt in it. We never drank that water. [205]

Some children said their employers did not provide enough water to last throughout the workday; placed water so far from where they were working that it was inaccessible to them; or didnt allow them to take breaks to drink water. Katrina T., 15, Diego T., 16, and Rafa B., 16, worked together on a tobacco farm in eastern North Carolina in the summer of 2013. They told Human Rights Watch that typically a cooler of water was left on the back of a pick-up truck in the field, often quite far from where they worked, and when it ran out, their employer often would neglect to refill it. They dont bring it down the row [of tobacco plants]. Sometimes they just leave it there and the water runs out, and they leave it empty until the next day, Rafa said. [206] Ezra B., a 15-year-old worker in eastern North Carolina, said, There was water, but the rows [of tobacco plants] were long, so if you had to go back to get some water and go all the way back down your row, by the time you did it people were finished [topping their rows] and it was time to move on. [207]

Other children interviewed by Human Rights Watch said that their employers did not provide water at all. In these cases, children brought their own water or went without. Claudio G., 16, started working in tobacco in eastern North Carolina at age 14. He told Human Rights Watch that one of his former employers didnt provide drinking water for workers at all. Describing what it was like to work in high heat without water available in 2012, he said, It was 100 something [degrees] that day. I was working with grown people, and I was the only young one. I was 14. It was so hot. The man didnt bring us water. I was dehydrated, and I didnt want to work. I felt like I was going to pass out. [208] Henry F., 17, worked for hire for several tobacco growers in the 2013 season near the town where he lives in Kentucky. When asked about his access to water at work, he said, Some farmers bring it [water]. Some farmers they just leave you to

work, and it depends on what you bring. Its up to you if you want to bring water or not. [209]

Very few children interviewed by Human Rights Watch reported having access to a bathroom or portable toilet. Most children said that they would relieve themselves in wooded areas, if there were any near the worksite, or refrain from relieving themselves at all during the day, including by declining to drink liquids. Some told Human Rights Watch that a contractor or grower would drive them to a nearby gas station, store, or other public facility, or allow them to walk to a public facility or to the growers home if it was located near the worksite, where they could use a bathroom.

Lucia A., 17, has been working on tobacco farms in North Carolina since age 12. She told Human Rights Watch that she rarely had access to a bathroom while working in tobacco in the 2012 season: If you have to go, theres the woods. First time I was out in the field, I told my mom I have to go pee. And my mom was like, You have to go in the woods. But I was scared. I didnt want to. My mom said, You cant go all day like that. I said, What if a snake comes out?[210] Sally G., 16, who lives in North Carolina and worked for the first time in the summer of 2013, told Human Rights Watch, There is no bathroom. Either you hold it or ask to go to a gas station or restaurant. If not we just do what the other ladies do, just go to the woods. Her sister Marissa, 14, said, Id rather just hold it. Sally agreed: Yeah, I hold it.[211]

Margarita S., a 16-year-old worker in North Carolina, described her access to toilets when she worked on tobacco farms in 2012: Wed stop at a gas station to let us use the bathroom. I never saw a porta potty. Youd have to just get yourself somewhere to go to the bathroom. To the trees, or just try to get away from the others working, have someone else help cover you up.[212] When asked if there was a bathroom at his worksite when he worked on tobacco farms in 2012 in Kentucky, 14-year-old Ricardo M. said, No. You just have to wait it out. Or go out in the woods.[213]

Most children interviewed by Human Rights Watch stated that they did not have access to hand-washing facilities. Many children reported rinsing their hands with drinking water provided by their employers, but they were rarely given soap. Without access to handwashing, children said that they were not able to wash off dirt, pesticide residues, or residues from the tobacco leaves, including before eating lunch or snacks. Some children said that they were permitted to wash their hands at a gas station, store, or other public facility, and a few said their parents would bring their own soap and water to the tobacco fields to allow them to wash their hands before lunch.

The experience of Blanca A., a 14-year-old worker in eastern North Carolina, was typical among the children interviewed by Human Rights Watch for this report. They had a cooler full of water, and people would get cups full of water and pour it over my hands for me, she said. But there was no soap. [214] Luciano P., 18, started working on tobacco farms near Lexington, Kentucky at age 15 and worked each season. On the barn [at one farm], they have a water pump, he said. We use that to wash our hands. Theres no soap, just clean water.[215]

Many children told Human Rights Watch that tobacco plants left a sticky residue on their hands that they could see, feel, and taste when eating. They observed the residue on their hands whether or not they wore gloves, though they described it as more severe if they worked without gloves. Nine-year-old Gregory T., who goes to work to help his mother harvest burley tobacco on farms in Tennessee, told Human Rights Watch how his hands felt after working in the 2013 summer: The plants are sticky. They feel like bubble gum. Its more and more sticky. When I put my hands together, they stick.[216]

Many described eating with unclean hands during their breaks and at lunch. Katie P., an 11th grader and a member of the Future Business Leaders of America, told Human Rights Watch about her experience working on a tobacco farm in North Carolina in 2013 where she did not have access to hand-washing: Since the tobacco is like really sour tasting, all that bad taste goes to your mouth, like when you are eating, like during break. And theres no place to wash your hands or anything.[217] Carla P., 16, and her younger sister, Lisandra P., 14, have worked for hire together with their parents on tobacco farms in Kentucky for several years. The sisters told Human Rights Watch that one of the tobacco growers for whom they worked in 2013 gave them water to rinse their hands, but no soap. Carla said that tobacco plants left a residue on her hands that she could taste: Itll be hard to eat after youre done working because it will taste sour and yucky.[218] Lisandra observed the same effect: Its dirty. Your hands are black. If you make something [prepare food] after youve touched tobacco, it tastes sour.[219]

Many children interviewed by Human Rights Watch stated that they did not have the opportunity to shelter in shade during the workday. Some reported that the only shade available was inside vehicles used to transport the workers to the worksite, or in wooded areas when the worksite happened to be located near one. For example, Emilio R., a 16-year-old worker in North Carolina, said, The heat is the hardest thing. It was hot. I could manage everything but the heat was just unbearable. Wed try to work hard to rush to get out of the row to have some shade. Youre mostly in the middle of the field where theres really no cover.[220] Raul D., a 13-year-old worker in North Carolina said, Some days my skin gets red and it feels like its burning on the inside. The worst thing? The heat from being out in the sun with no shade all day: that is really the worst thing.[221]

The Occupational Safety and Health Administrations (OSHA) Field Sanitation Standard requires agricultural employers with at least 10 employees to provide sufficient and accessible drinking water, hand-washing facilities, and toilets. [222]

According to OSHA:

A review of public health literature found that limited access to toilets and strict work environments where workers are not given time to take breaks contribute to chronic urine retention, increasing the risk of urinary tract infections. [224] In addition, public health studies have shown that washing with soap and water can reduce both pesticide and nicotine residues on the hands of tobacco workers by 96 percent. [225]

Sun exposure is associated with several types of skin cancer, and research suggests that sunburn and sun exposure in childhood and adolescence can increase the risk of melanoma, the most serious form of skin cancer, later in life. Agricultural workers are particularly susceptible due to chronic, prolonged time in the sun and other occupational hazards of farm work. [226]

Most children interviewed by Human Rights Watch for this report described working long hours, typically between 50 and 60 hours per week. Many children said they felt pressure to work quickly. While most employers allowed children two or three breaks per day, some

children were not allowed to take regular breaks, even when they felt sick or were working in high heat. Children described utter exhaustion after working long hours on tobacco farms.

Most children earned the federal minimum wage of \$7.25 per hour for their work on tobacco farms, though some children working in burley tobacco were paid a fixed rate during certain parts of the season based on the quantity of tobacco they harvested or hung in barns. Some children reported problems with wages including earning less than minimum wage for hourly work, deductions by the contractor or grower for drinking water or for reasons that were not explained to them, or because of what they believed was inaccurate recording of hours by labor contractors.

Most children interviewed by Human Rights Watch attended school full time and worked in tobacco farming only during the summer months, after school, and on weekends. A few children who had migrated to the United States for work and had not settled in a specific community said that they did not enroll in school at all or enrolled in school but missed several months in order to perform agricultural work, including in tobacco farming.

Most children interviewed by Human Rights Watch described working long hours, typically between 10 and 12 hours per day, and sometimes up to 16 hours. Most said they worked 50 to 60 hours a week. Most employers allowed them two or three breaks per day, including one 10 to 15 minute break in the morning and one in the afternoon, as well as a 30 to 60 minute lunch break in the middle of the day. However, some children told Human Rights Watch that employers did not allow children to take meaningful regular breaks during the work day or breaks even when children felt sick or in high heat. Many children said that some employers pressured them to work as quickly as possible.

Most children interviewed by Human Rights Watch worked five days per week; some worked fewer, and some reported working six or seven days per week during particularly labor intensive periods of the tobacco farming season. In some cases, childrens hours exceeded 70 hours per week.

Some children in each of the four states where Human Rights Watch did research stated that they sometimes worked long hours, more than 5 days per week, or without breaks in order to increase their earnings. However, most children described having little control over their hours day-to-day. Sometimes the labor contractor or grower expected them to work past dark or start work in early morning hours. If worksites were located far from childrens homes, they left home very early and came home late. Children told Human Rights Watch that sometimes they worked shorter days because the employer determined that the work had been completed or because the employer allowed workers to stop, in some cases due to heavy rain or high heat.

US federal law permits children to work in agriculture for unlimited hours, outside of school hours. In non-agricultural jobs, 14 and 15-year-olds cannot work before 7 a.m. or after 7 p.m., except during the summer when they can work until 9 p.m.; and may not work more than 3 hours on a school day, 18 hours in a school week, 8 hours on a non-school day, and 40 hours in non-school week. [227]

Most children interviewed by Human Rights Watch for this report stated that they often started work at 6 or 7 a.m. and worked through the evening. Fourteen-year-old Marissa M., who worked in tobacco farming for the first time in 2013, described a typical work schedule among the children interviewed by Human Rights Watch: We leave [for work] at 6 a.m., start [working] at 7 a.m., get out at 6 p.m.[228] Some children in Kentucky reported working very late in the evening, either working until dark at the height of summer when the sun sets late in the day, or working after dark in tobacco curing barns during the fall and winter months.

Danielle S., 16, and Lazaro S., 15, who work for hire with their parents on tobacco farms in central Kentucky, told Human Rights Watch that they would sometimes work until 11 p.m. when they were stripping cured tobacco leaves off of sticks in barns. Danielle said, We go early in the morning, depending on the tobacco. If it rains, we dont go. If its good weather, we go early, like 7 a.m., and well work until 7 at night. When were stripping [in barns], we come home really late at night, like 11 at nightSometimes we finish late.[229] Bridget F., 15, said her crew in Kentucky would return to work in the evening after a break in the middle of the afternoon: Wed go to work at 6 a.m. and work until 3 [p.m.] and then wed take a break, go home and stuff, and then wed go back at 5 [p.m.] and work until 9 [p.m.]. It was really tiring.[230]

Martin S., 18, told Human Rights Watch that the labor contractor on a Kentucky farm where he worked in 2012 did not give them regular breaks during the work day. We start at 6 a.m. and we leave at 6 p.m., he said. We only get one five-minute break each day. And a half hour for lunch. Sometimes less. [231] Blanca A., a 14-year-old farmworker in North Carolina, told Human Rights Watch that the labor contractor who employed her in 2012 pressured workers to end their breaks early: He [the contractor] always had a machete. He was mean. Hed yell at us to hurry up and go back in the fields when we were taking breaks. He would make us go out [back to work in the field] when we were on breaks. Hed get frustrated at us and start screaming. He was so strict. [232]

Other children told Human Rights Watch about experiences with labor contractors who did not allow the children to rest when they felt sick and threatened to cut their pay. Elena G., 13, works on tobacco farms in eastern North Carolina with her mother and her older sisters. Describing her experience during her first summer working on tobacco farms in 2012, she told Human Rights Watch, I would tell the boss [labor contractor] that I needed to stop for a minute, and he was like, Either you work, or you get out, and Im not going to pay you for the time that youre out of the field. And then I would keep going, but my mom and other workers would help me, but [the contractor] would get mad, saying we [each] need to do our own row [of tobacco plants]. The hardest part was cutting the suckers and keeping up with all the workers. All the workers were older. [We] were the youngest ones. They had more experience, so they could go faster. [233]

Elenas older sister, 18-year-old Natalie G., told Human Rights Watch that she would hide herself in a row of tobacco plants to get a few minutes of extra rest when she felt sick. She described one instance in 2012: I got really, really tired working. My mom would say, Hide. Sit down for a few minutes to rest, but then youve got to get back to work. My knees would be hurting, but the labor contractor would keep hurrying me up. He would wait for everyone at the end of the row and then say, Youre slacking, hurry up![234] Jorge P., a 16-year-old worker in eastern Tennessee, said, It was a hard job. We had to be like super fast. They [the labor contractors] didnt want you to quit for a second. They wanted you to keep working. Even though it was raining, they didnt want us to stop.[235] Joseph T., told Human Rights Watch that he started working on tobacco farms in 2011, when he was 16. He described how he felt while trying to keep up with adult workers on tobacco farms in North Carolina in 2012: Its like youre walking and everybody else is running. Like that.[236]

Children in Kentucky and Tennessee told Human Rights Watch that being paid based on the volume of tobacco they harvested contributed to the pressure to work quickly. For example, 18-year-old Jaime V., an 11th grade student, started working in tobacco in Tennessee at age 14. Describing his experience working in tobacco in 2012, he told Human Rights Watch, The tobacco is the hardest, because you have to work fast. If youre not fast, you dont make money because its contract [piece rate] work. Its 22 or maybe 27 cents per stick. You have to work very, very fast to make any money. [237] Yanamaria W., a 14-year-old girl who works on tobacco farms with her parents and her younger brother, had a similar observation about working for a piece rate in Kentucky in 2013: The hardest part is the cutting. Its harder because youre paid by a contract [a piece rate], not by the hour, so if you want to get more money, you have to work faster. [238]

Pressure to work fast may put children at additional risk of injury. As cited above, in one case documented by Human Rights Watch, pressure by a tobacco grower on 17-year-old Isaac may have contributed to his loss of two fingers in an accident involving a mower. [239]

Some children told Human Rights Watch that they worked up to six or seven days a week. Claudio G., 16, said that he worked seven days per week in tobacco in North Carolina during the most labor-intensive part of the season: We worked every day, Monday to Sunday. The farmer was behind on his crop, so we had to work seven days. It was tough because we didnt get any breaks, and when youre working every day, you cant enjoy the weekend. [240] Andrea D., 16, started working for a tobacco grower in Kentucky together with her parents at age 6. She told Human Rights Watch that during the summer months, she and her family often worked for many days straight without taking a day off during labor-intensive parts of the growing season. In the summer we work every day, every day until we finish [the work]. From 8 in the morning until 6 [p.m.].[241]

Children interviewed for this report in North Carolina told Human Rights Watch that they often worked on farms located far from their homes, based on where the labor contractor needed workers on any given day. On such days, children would wake very early in order to reach the work location by early morning. For example, Eliceo F., 15, said, Me and my brother would wake up around 3 a.m. because the job was pretty far and wed get there at 6 a.m. and start working. Wed get there and work, take our break, like 35 minutes for lunch. Then wed start working again until we were done. Usually Id fall asleep [in the car] on the way back [home]. I was tired. [242]

Elan T., 15, and Madeline T., 16, worked together on a tobacco farm after migrating to North Carolina from Mexico with their mother and younger brother. Madeline described the fatigue they felt after working for 12 or 13 hours in tobacco fields: Just exhaustion. You feel like you have no strength, like you cant eat. I felt that way when we worked so much. Sometimes our arms and legs would ache. [243] Patrick W., 9, described similar feelings after working long hours with his father, a hired tobacco worker, in Tennessee in 2013. I feel really exhausted, he said. I come in [to the house], I get my [clean] clothes, I take a shower, and then its usually dark, so I go to sleep. [244]

Bridget F., a 15-year-old tobacco worker in Kentucky, told Human Rights Watch about her work on tobacco farms in 2013: Its really hard. The long hours and its really hot. And when youre done, youre really tired. You just want to go to sleep.[245] Sixteen-year-old Dario A., who worked on tobacco farms in Kentucky in 2013, said, The hardest of all the crops weve worked in is tobacco. You get tired. It takes the energy out of you. You get sick, but then you have to go right back to the tobacco the next day.[246]

Nearly all of the children interviewed for this report stated that they were working on tobacco farms for hire. Of the nine children Human Rights Watch interviewed who worked on their family farms, four also worked for hire on farms owned by other tobacco growers. Only a few of the very youngest children worked with their parents sporadically and without pay. Among children working for hire, about half of the children interviewed were employed by a labor contractor or a labor subcontractor at some point in 2012 or 2013, although many of them also worked directly for tobacco growers.

Most children said that employers paid them hourly wages for their work. Those paid an hourly wage stated that they typically received wages weekly, although some reported being paid every two weeks or daily. Other children, primarily those working in burley tobacco in Kentucky, Tennessee, and Virginia, stated that they received a fixed rate of payment for the quantity of tobacco they harvested or hung in barns (piece rate wages). When children reported earning piece rate wages, they were paid by the stick, meaning their wages were determined by the number of tobacco plants they cut and placed on wooden sticks, or by the number of sticks of tobacco plants they hung in curing barns.

Most children stated that they received wages directly for their work; some said that employers added childrens wages to a parents form of payment. Some said that they were paid directly by growers, often by check. Others were paid by labor contractors who received lump sum payments from growers. When children were paid by contractors, they were most often paid in cash. A few of the youngest children told Human Rights Watch that they received a small allowance from their parents for working with them in the tobacco fields. Some recorded the hours they worked or quantity of tobacco they harvested independently and reported their work to their employers. Other children stated that employers, either the labor contractor or grower, kept a record of their work and determined their wages at the end of the week.

While most children reported earning at least US federal minimum wage, some earned less. Some reported problems with wages including deductions by the contractor or grower for drinking water or for reasons that were not explained to them, or because of what they believed was inaccurate recording of hours by labor contractors.

Most children interviewed by Human Rights Watch reported earning the federal minimum wage of \$7.25 per hour for their work on tobacco farms. For a child working approximately 50 to 55 hours per week at minimum wage, earnings amounted to between \$350 and \$450 per week. Children interviewed by Human Rights Watch in North Carolina reported earning higher wages in tobacco relative to other crops. For example, Blanca A., 14, works for hire on tobacco farms in eastern North Carolina with her mother and her older sister. She said, I really dont work in anything else [besides tobacco]. Tobacco gets paid better than cucumber. [247]

While some children earned more than minimum wage, some children received less than the minimum for hourly work. For example, Natalie G., an 18-year-old worker in North Carolina who volunteers at a local community garden, told Human Rights Watch that a labor contractor paid her significantly less than minimum wage for hourly work in 2012: He tried to pay us less than we worked. He actually ended up paying us about \$6.50 per hour. For example, I worked [for three 11-hour days] and earned \$240, but didnt get [paid] that full amount. [248] Martin S., 18, migrated to Kentucky from Mexico by himself in 2011 to join his mother who was already living in the US,

and started working for a labor contractor on tobacco farms when he arrived in Kentucky. He told Human Rights Watch that his crew was paid less than minimum wage in 2012: All the workers in our group were paid \$7 per hour, and they were all paid cash. [249] Similarly, Isaac S., age 18, told Human Rights Watch that a tobacco grower told him and others in his work crew that they would receive the federal minimum wage of \$7.25 per hour for their work on a tobacco farm, but the grower paid them only \$6 per hour in cash. He [the grower] paid us less than we were promised, he said. [250] Another child interviewed by Human Rights Watch reported earning just \$40 for six days of work planting tobacco in Kentucky. [251]

With some exceptions, agricultural workers are entitled to minimum wage. These exceptions include workers on small farms and some piece-rate workers, including certain local hand harvest laborers and non-local children ages 16 and under who are working alongside their parents. [252] Where workers are entitled to minimum wage, agricultural employers may pay either an hourly rate or a piece-rate, but those who pay on piece-rate must by law ensure that the earnings for all hours worked in a week are sufficient to bring the average hourly wage up to minimum wage, unless they fall under one of the previously mentioned exceptions. [253]

All agricultural workers are deprived of overtime pay protections under the Fair Labor Standards Act (FLSA). Most other workers, by contrast, are required to be paid one-and-a-half times their regular rate of pay for each hour worked in excess of 40 hours per week. [254] In addition, agricultural workers are also excluded from the protections of the National Labor Relations Act and do not have the right to organize and collectively bargain with their employers, except in cases in which states (such as California) enact state laws protect their right to organize. [255]

Children working in Kentucky, Tennessee, and Virginia told Human Rights Watch that they earned piece rate wages during the burley tobacco harvest. Workers described cutting down tobacco plants full of leaves and sliding the plants onto wooden sticks designed to be hung in barns for curing tobacco leaves. Each stick held six tobacco plants, and workers were paid a fixed rate based on the number of sticks of tobacco plants they completed in a day. Some workers were also paid piece rate wages for the number of sticks full of tobacco plants that they hung in curing barns in a day. Children in Kentucky reported earning between 12 cents and 16 cents per completed stick for harvesting tobacco plants. Children in Tennessee reported earning between 22 cents and 55 cents per stick for harvesting tobacco plants and hanging the sticks in curing barns. The daily earnings of children interviewed by Human Rights Watch varied considerably under this system depending on the childs pace of work and the fixed rate offered by employers. Some children reported completing 250 sticks per day, and earning between \$50 and \$60 for a full day of work, while others reported completing more than 800 sticks per day, and earning over \$100 for a full day of work. Some children interviewed by Human Rights Watch in these states reported earning piece rate wages for performing certain tasks and hourly wages for other tasks.

Henry F., a 17-year-old worker in Kentucky, the oldest of six siblings, plays on his high school soccer team, and has been working in tobacco farming since he was 13. He told Human Rights Watch that he was paid a piece rate for his work cutting burley tobacco plants during the harvest and an hourly rate to hang sticks of harvested tobacco in curing barns in 2013. Explaining this system of work and payment, he said, You put a stick in the ground, put the spear on top of it, and cut six plants of tobacco and put them on the stick. And you do that until you finish a row. And you write down how much you did in a book, to keep count of how many you got. You get paid 14 cents a stick. [256] Some children in Tennessee told Human Rights Watch that their wage included payment for both cutting tobacco plants and hanging them in barns. Jaime V. told Human Rights Watch: We got paid 22 cents for a stick. That was for the cutting and the hanging. [257]

Public health studies among farmworkers have found that piece rate payment adds additional pressure on workers to work as quickly as possible and avoid taking breaks, sometimes even at the expense of drinking water or cooling down when overheated. [258] Agustin F., a 15-year-old worker, migrates to Kentucky from Florida each year to work on tobacco farms. He described the pressure he put on himself to work fast, saying, When Im cutting, I earn \$200. [It] depends on how much I work. We make about 14 cents per stick. [It] depends on how much you cut. You can earn \$100 or \$125, \$135 in a day. If you can stand it, you keep working. I work until I cant stand it. [259]

Some children reported problems with wages including deductions by the contractor or grower for drinking water; for reasons that were not explained to them; or because of what they believed was inaccurate recording of hours by contractors. For example, Eli B., 15, lived alone for two months in North Carolina while his mother migrated to another state for work. Eli started working on tobacco farms at age 11, and he told Human Rights Watch that in his first season, his employera labor contractorroutinely paid him less than he was owed for the time he had worked. They would steal your money, the contractors, he said. I wrote down my hours I worked, and summed it up, but when he would pay me that day, it didnt come out as I had it down. It was my first year. I didnt know how things worked out. Eli said that he never complained to his employer about his pay: No, I never asked him. I asked him how much I got paid an hour, thats all. [260]

Jaime V., an 18-year-old worker in Tennessee, also reported inaccurate recording of hours by his labor contractor several years ago: Sometimes my check would be short by 7 or 10 hours. We got paid every two weeks. But sometimes the hours didnt turn out right. I would talk to the contractor about it, but hed say, I dont know. He didnt do anything about it.[261] Estevan O., 15, told Human Rights Watch that an employer he worked for in North Carolina in 2012 docked his pay allegedly because he made mistakes in his work: The contractor kept track of hours. Sometimes they would complain and take two hours off because we supposedly didnt do the job right, but we went and fixed it anyway. They didnt warn us about this penalty.[262]

Children also reported deductions from their pay for car rides to the work sites, water, or reasons they did not understand. Margarita S., a 16-year-old worker in North Carolina who plans to attend college and study to be a teachers assistant, told Human Rights Watch about deductions from her wages in 2012: Ten dollars was taken out of every check. Id pay \$10 per day for a ride. Sometimes \$15. I also had to pay for water, Gatorade, soda that they would have there [where we worked].[263] Marissa G., 14, told Human Rights Watch that she started working on tobacco farms in North Carolina so that she could buy her own clothes and school supplies. She said that she did not receive any pay for a day she worked topping tobacco in 2013: I got \$130, but for one day I worked the labor contractor didnt pay me. He said The boss man didnt give everyone pay for last Friday. I dont know why. He promised to pay me next week.[264] Under federal law, agricultural employers must provide workers with wage statements explaining any deductions from their wages. Workers must give employers permission to make deductions for transportation, food, and some other expenses.[265]

The vast majority of children interviewed by Human Rights Watch attended school full-time and worked in tobacco farming, and in some cases in other agricultural crops as well, only during the summer months, after school, and on weekends. However, some children who

had migrated without authorization to the United States for work and had not settled in a specific community told Human Rights Watch that they did not enroll in school at all or enrolled in school but missed several months in order to perform agricultural work, including in tobacco farming. Some children stated that they occasionally missed school in order to work in times of financial hardship for their families.

Calvin R. migrated to the United States by himself at age 13, leaving his family behind in Mexico. He never enrolled in school. Instead, he joined a migrant crew that travels between several states to work in different crops. He told Human Rights Watch he started working in tobacco in 2012 at age 16: We come to Kentucky every year from other states. We work in Washington in the apples, and in Tennessee theres a packing plant where we work. We came to Kentucky at the beginning of August. We usually come here around the same time every year to work in tobacco. [266] When asked about his plans for the future, Calvin said, If tomorrow or the next day brings an opportunity to study, I would like that. [I]f in the future, I could accomplish my dreams, I would feel good and proud of myself And one of my most important dreams is to continue studying. [267]

Jason H., 17, told Human Rights Watch that he migrated alone to the United States from Mexico in 2012. Each year he travels to North Carolina from Florida in March to work in tobacco and other crops. He works all year long, and does not attend school. The work is like a wheel, he said. Its never going to be finished. [268]

Other migrant children told Human Rights Watch that they missed several months of school to work in tobacco farming. For example, Guillermo S., 18, and Victor R., 15, are cousins working in different agricultural crops in different states, including on tobacco farms in North Carolina. Their parents live in Mexico. Guillermo told Human Rights Watch, We just got here to North Carolina from Florida in June. Well stay here six months, until November. Then well go to Florida again. [269] When asked about his status in school, Victor told Human Rights Watch, I go to school in Florida, but not here, indicating that he missed at least three months of school in 2013. [270]

Several children reported to Human Rights Watch that they had skipped a few days of school in recent years to work in tobacco farming. These children said they worked instead of going to school to help their parents in times of financial hardship or when a family member was injured and unable to work. Yanamaria W., a 14-year-old worker in Kentucky, told Human Rights Watch, Ive skipped school to go to work. Our house [rent payment] takes up like \$600 a month, and my parents dont get [earn] much when theyre doing [sorting] the [tobacco] leaves.[271]

Adriana F., 14, who works on tobacco farms in Kentucky with her parents and her four brothers, told Human Rights Watch that she had missed a few days of school in 2012 and 2013 to work in tobacco farming. I missed school to go work when my Dad popped a bone in his back and he needed me to help him, she said.[272] Her 17-year-old brother, Henry F., said that he occasionally skipped school in 2012 and 2013 to earn money to help his family: Ive missed school to work. I chose it myself. My parents always told me to go to school. But I always choose my family over everything else.[273]

In addition, some children reported working long hours after school that interfered with their ability to keep up with schoolwork. Luciano P., is 18 and in 10th grade at a Kentucky high school. He moved to the United States at age 11, attended school for several years, but dropped out of school at 15 to work for most of the year on tobacco farms. I used to go to school when I was little, but I was working in tobacco, he said. Two years ago, when I was 15, 16, I stopped going to school. I would just work year round. He re-enrolled in school at 17, and now he is struggling to make up for the missed years: Now I started going to school and they put me in 10th grade, and Im in a program at school that will help me catch up. Its a lot of work. [274] He said that since he re-enrolled he works only after school: Once I started school when I was 17, I never missed school to go to work. They say in school, every day counts. [275]

The right to education is a fundamental right belonging to all children, regardless of immigration status, and is protected under both US law and international human rights law.[276]

In recognition of the potential benefits of some forms of work and of the realities that require many children to enter the workforce to support their own or their families basic needs, international law does not prohibit children from all work. However, international treaties address the particular circumstances under which children under 18 may work and define standards to protect children from exploitation and other harmful consequences of child labor.

Based on the findings documented in this report and applicable international law, Human Rights Watch considers the employment of children in the United States in tobacco farming tasks which expose them to direct contact with tobacco plants to be in violation of international law prohibiting children under the age of 18 from engaging in harmful or hazardous work. US and state laws and practices concerning childrens participation in agricultural work are inconsistent with or violate international conventions protecting the rights of children.

ILO Convention No. 182 Concerning the Prohibition and Immediate Elimination of the Worst Forms of Child Labor (Worst Forms of Child Labor Convention), ratified by the United States in 1999, prohibits slavery or slave-like practices, child pornography and prostitution, illicit activities, including drug trafficking, as well as the employment of children under the age of 18 in work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children (also known as hazardous work).[277] As a state party to the Worst Forms of Child Labor Convention, the United States is obligated to take immediate and effective steps to ascertain what forms and conditions of child labor in agriculture violate the convention and then eliminate them.[278] The Convention obliges member states to take immediate action to prevent children from engaging in the worst forms of child labor; to provide direct assistance for the removal of children already engaged in the worst forms of child labor; and to identify and reach out to children at risk.[279] Although the ILO does not have a specific list of occupations that constitute hazardous work, agriculture is considered one of the three most dangerous sectors in which children work, along with construction and mining.[280]

Far from acknowledging the dangers of agricultural work to children and taking these appropriate steps, the United States by law permits children to engage in such labor, including on tobacco farms, with fewer restrictions than children working in other industries. The ILOs Committee of Experts has observed that section 213 of the US Fair Labor Standards Act authorizes children aged 16 and above to undertake, in the agricultural sector, occupations declared to be hazardous or detrimental to their health or well-being by the Secretary of Labor. [281] In its 2012 and 2014 reports, [282] the Committee noted with serious concern the withdrawal of proposed regulations (explained in detail below), which would have increased the parity between agricultural and non-agricultural child labour prohibitions by

prohibiting some tasks associated with agricultural work to children under 18 and strengthening the protection provided to children under 16 years working in agriculture, and strongly urged the US government to take measures to protect the health and safety of children working in agriculture. [283] The Committee also recommended that the government reintroduce the proposed regulations. [284]

Based on the findings documented in this report as applied to the Worst Forms of Child Labor Convention and ILO Recommendation No. 190 Concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labor (Worst Forms of Child Labor Recommendation), [285] Human Rights Watch considers any exposure to tobacco plants in tobacco cultivation, harvesting, and curing to be hazardous child labor because of the health risks to children associated with exposure to nicotine, pesticides, and tobacco dust. While there may be some light work on tobacco farms that is suitable for children, particularly in the early stages of tobacco production, Human Rights Watch believes most aspects of tobacco farming in the United States constitute hazardous child labor under ILO definitions.

The Worst Forms of Child Labor Recommendation provides guidance to countries on determining what types of work constitute harmful or hazardous work. The recommendation states that in defining the worst forms of child labor, consideration should be given, as a minimum, to:

Each state party to the Worst Forms of Child Labor Convention is expected to use this guidance to identify specific tasks and occupations that it considers hazardous for children.

Human Rights Watch research found that children participating in the cultivation, harvesting, and curing of tobacco in the US routinely face the risks outlined in subparagraphs (c) through (e), including work at dangerous heights; work with dangerous machinery, equipment and tools; work that involves the manual handling or transport of heavy loads; work in an unhealthy environment where they are exposed to hazardous substances (including nicotine and pesticides) and extreme temperatures; and work for long hours. Most notably, Human Rights Watch believes that any exposure to tobacco plants or dried tobacco constitutes hazardous work under subparagraph (d) due to the health risks to children.

The Worst Forms of Child Labor Recommendation states that certain types of work in an unhealthy environment (outlined in subparagraph (d) above) may be permitted for children ages 16 and above on the condition that the health, safety and morals of the children concerned are fully protected, and that the children have received adequate specific instruction or vocational training in the relevant branch of activity. [287] Human Rights Watch has determined, based on our findings, that under the conditions present in farms in the US, there is no way to make exposure to tobacco plants or dried tobacco leaves safe for children under 18.

The ILO Office provides technical assistance to governments in the implementation of the Worst Forms of Child Labor Convention, but in Human Rights Watchs view, does not provide adequate guidance regarding the hazardous nature of tobacco work for children. In a discussion with Human Rights Watch, an ILO expert stated that the ILO does not believe that personal protective equipment (PPE) is sufficient to protect children working in tobacco cultivation, harvesting and curing. [288] According to Benjamin Smith, ILO senior officer for Corporate Social Responsibility, PPE generally does not render hazardous work safe enough for children of legal age to be employed. Evidence from ILO projects underscores the fact that, for persons under 18, PPEs give a false sense of security and are not consistently worn because they are generally too large, too expensive, and too uncomfortable. [289]

Recognizing the risks to children of work in tobacco farming, the US Department of Labor (DOL) proposed regulations in 2011 that would have prohibited all children under 16 (the minimum age for hazardous work in agriculture in the US) from all work in the tobacco production and curing, including, but not limited to such activities as planting, cultivating, topping, harvesting, baling, barning, and curing. [290] However, the regulations were withdrawn in 2012 in response to pressure from agricultural groups. [291] As noted above, the ILO Committee of Experts strongly urged the US government to reconsider withdrawal of the proposed regulations. [292]

Such problems documented by Human Rights Watch in the US seem likely to extend to tobacco farms outside the United States. A resolution from a February 2003 ILO tripartite meeting on the future of employment in the tobacco sector, has encouraged all parties engaged in implementing the Worst Forms of Child Labor Convention and the Minimum Age Convention[293] to adopt concrete measures to eliminate child labour in the tobacco chain. The resolution called on the ILO director general to continue to promote the conventions and to assist in their application specifically in the tobacco sector.[294] These efforts should include providing governments with effective guidance regarding the hazards of tobacco work, and encouraging countries to review and update their hazardous work lists under the Worst Forms of Child Labor Convention accordingly.

A number of countries have prohibited all children from working in tobacco farming, including Brazil and India, the top two global producers of leaf tobacco after China. [295] Brazil prohibits children under the age of 18 from planting, with the exception of clearing, levelling soil and weeding; at harvest, processing or industrialization of tobacco. [296] India prohibits children under 18 from working with tobacco, including handling tobacco in any form. [297] Malawi, the sixth leading producer of tobacco worldwide, prohibits children from working in all tasks on commercial tobacco farms, and from certain tasks on all farms: Tobacco Sector: i) topping and suckering activities or handling tobacco leaves in the harvesting process; ii) handling or grading tobacco leaves in damp conditions or conditions of poor lighting or ventilation; iii) any other work involving tobacco in commercial tobacco estates and farms. [298] Other countries, including Russia, [299] Kazakhstan, [300] Uganda, [301] also prohibit children under 18 from performing many tasks that expose them to tobacco plants.

The Eliminating Child Labour in Tobacco Growing (ECLT) Foundation, a Geneva-based partnership of tobaccofarmers and companies dedicated to protecting children from child labour wherever tobacco is grown, [302] recommends that the following activities be prohibited for children under 18 years of age, in line with ILO conventions 138 and 182:

According to ECLT Foundation Executive Director Sonia Velasquez, ECLT also believes that not all activities in tobacco growing are hazardous or prohibited for children and recommends that farmers provide decent work for youth of legally working age, whenever allowed by the national laws.[304]

Seven of the ten companies approached by Human Rights Watch for this project serve on the board of the ECLT Foundation. [305]

The United States has signed but not ratified the Convention on the Rights of the Child (CRC),[306] but as a signatory is obliged to refrain from acts that would defeat the treatys object and purpose.[307] The CRC sets out the minimum protections to which childrendefined as persons under age 18are entitled. Article 32 of the CRC provides specifically that children have a right to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development. Governments must take appropriate legislative, administrative, social and educational measures in this regard.[308]

The International Convention on the Elimination of All Forms of Racial Discrimination (ICERD), ratified by the United States in 1994, defines prohibited discrimination as any race-based distinction, exclusion, restriction or preference that has the purpose or effect of curtailing human rights and fundamental freedoms. [309] The Committee on the Elimination of Racial Discrimination, which monitors state compliance with the ICERD, has interpreted the convention to prohibit laws or policies that have an unjustifiable disparate impact on racial and ethnic minorities. [310]

The burden of weaker US labor law protections for agricultural workers, as compared to non-agricultural workers, falls overwhelming on Hispanic American citizens and immigrants. Most hired agricultural workers in the United States are Hispanic.[311] As a result, the inadequate labor protections for agricultural workers have a disparate impact on Hispanic American citizens and non-citizen immigrants, amounting to discrimination under international law.[312]

In 2008, the committee noted with concern that, workers belonging to racial, ethnic and national minorities, in particular women and undocumented migrant workers, continueto be disproportionately represented in occupations characterised by long working hours, low wages, and unsafe or dangerous conditions of work.[313] The committee has called upon the US government to take all appropriate measures to review existing laws policies to ensure the effective protection against any form of racial discrimination and any unjustifiably disparate impact.[314]

The right of children to the highest attainable standard of health is found in international instruments, including the Universal Declaration of Human Rights, International Covenant on Economic Social and Cultural Rights (ICESCR) and the Convention on the Rights of the Child. [315] The ICESCR, signed by the United States in 1995 but not ratified, obligates governments to take the steps necessary for the prevention, treatment and control of occupational and other diseases, [316] and recognizes the right of everyone to the enjoyment of just and favorable conditions of work including safe and healthy working conditions. [317] Governments have the obligation to improve all aspects of environmental and industrial hygiene, for example, through preventive measures to avoid occupational accidents and diseases, and the prevention and reduction of the populations exposure to harmful substances such as harmful chemicals that directly or indirectly impact upon human health. [318]

Although the United States government has the primary responsibility to respect, protect, and fulfill human rights under international law, private entities also have responsibilities regarding human rights, as recognized by international law and other norms.[319] These include, at a minimum, the responsibility to respect all human rights, but also include additional responsibilities of protection in relation to certain issues, such as childrens rights. The broad consensus that businesses have human rights responsibilities is also reflected in various standards and initiatives, as discussed below. Consistent with their responsibilities to respect human rights, all businesses should have adequate policies and procedures in place to prevent and respond to human rights abuses associated with their activities or in their supply chain.

With respect to business responsibilities regarding childrens rights, the UN Committee on the Rights of the Child has identified that duties and responsibilities to respect the rights of children extend in practice beyond the State and State-controlled services and institutions and apply to private actors and business enterprises, and that all businesses must meet their responsibilities regarding childrens rights and States must ensure they do so. [320] The Committee also notes that voluntary actions of corporate responsibility by business enterprises, such as social investments, advocacy and public policy engagement, voluntary codes of conduct, philanthropy and other collective actions, can advance childrens rights, but that these actions are not a substitute for State action and regulation of businesses or for businesses to comply with their responsibilities to respect childrens rights. [321]The committee has paid particular attention to contexts where the impact of business activities and operations on childrens rights is most significant, including where businesses operate abroad in areas where there is insufficient State protection for childrens rights. [322]

The Childrens Rights and Business Principles, developed by UNICEF, the UN Global Compact, and Save the Children and launched in March 2012, identify a comprehensive range of actions that all business should take to prevent and address adverse impacts connected with their activities and relationships, and maximize positive business impacts on childrens lives. One of the principles is to contribute to the elimination of child labor in all business activities and business relationships. To accomplish this, businesses are encouraged not only to adopt child labor policies and due diligence procedures, but also to work with governments, social partners and others to promote education and sustainable solutions to the root causes of child labor, including through programs to support youth employment, skills development, and job training opportunities for young workers. [323]

The basic principle that businesses of all sizes have a responsibility to respect human rights, including workers rights, has achieved wide international recognition. The Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises, UN Human Rights Council resolutions on business and human rights, UN Global Compact, various multi-stakeholder initiatives in different sectors, and many companies own codes of behavior draw from principles of international human rights law and core labor standards in offering guidance to businesses on how to uphold their human rights responsibilities.

For example, the Protect, Respect and Remedy framework and the Guiding Principles on Business and Human Rights, which were developed by the then-UN Special Representative on Business and Human Rights, John Ruggie, and endorsed by the UN Human Rights Council in 2008 and 2011, respectively, reflect the expectation that businesses should respect human rights, avoid complicity in abuses, and adequately remedy them if they occur. They specify that businesses must exercise due diligence to identify, prevent, mitigate, and account for the impact of their activities on human rights.[324] More detail concerning expectations for companies within the Ruggie framework are discussed below, in *Responsibilities of Companies Purchasing Tobacco in the United States*.

The OECD sets out norms for responsible social behavior by multinational firms, incorporating the concept of due diligence and the content of ILO core labor standards. The guidelines call on enterprises to respect human rights, which means they should avoid

infringing on the human rights of others and should address adverse human rights impacts with which they are involved, including by carrying out human rights due diligence and working to remedy adverse human rights impacts they have caused or to which they have contributed. Regarding workers rights, these guidelines state that enterprises should contribute to the effective abolition of child labor and take adequate steps to ensure occupational health and safety in their operations. [325]

The US government and the states have an obligation to protect children from dangerous and exploitative work. However, legal loopholes in federal and state labor laws leave child farmworkers without many protections afforded to all other working children. Federal labor law allows farmworker children to work longer hours, at younger ages, and in more hazardous conditions than all other working children. State laws in North Carolina, Kentucky, Tennessee and Virginiathe four states where Human Rights Watch did research for this reportdo little to provide additional protections for child farmworkers. The double standard for child agricultural workers reflects a larger disparity in how farmworkers are treated under US law. Analysis of federal and state labor laws reveals glaring discrepancies in the treatment of agricultural workers as compared to workers in all other industries.

The Fair Labor Standards Act (FLSA), enacted in 1938, is the federal law that sets standards for minimum wage, overtime pay, recordkeeping, and the employment of children.[326] Agricultural employers are exempt from many provisions of the law, leaving adult and child farmworkers without many fundamental protections that are provided to workers in other industries. For example, all farmworkers are exempt from overtime pay provisions,[327] and farmworkers on small farms are exempt from minimum wage requirements.[328] Farmworkers are also excluded from the federal law that guarantees employees the right to engage in collective bargaining and prohibits employers from interfering with freedom of association.[329]

The child labor provisions of the FLSA treat agricultural work differently from work in other industries, providing child farmworkers with less protection than all other working children. For example, outside of agriculture, the employment of children younger than 14 is prohibited; [330] 14 and 15-year-olds may not work before 7 a.m. or after 7 p.m. (9 p.m. in the summer); [331] and the standard minimum age for work is 16. However, in agriculture there is no minimum age at which employers may hire children to work unlimited hours outside of school, day or night, provided the work takes place on a small farm with written parental consent. [332] In agriculture, any employer, regardless of the size of the farm, may hire children ages 12 and 13 to work unlimited hours outside of school, provided they have written parental consent or work on a farm where a parent is employed. [333] 16. In agriculture, employers may hire children ages 14 and up to work unlimited hours outside of school. There is no parental consent requirement. [334]

Under the FLSA, children working in US agriculture are also permitted to engage in tasks deemed particularly hazardous at younger ages than other working children. In nonagricultural occupations, the minimum age for particularly hazardous work is 18, including for children working in a parents business. In agriculture, 16 and 17-year-olds hired to work on farms are permitted to work in particularly hazardous occupations.[335] For example, using a power-driven circular saw or band saw is allowed for children starting at age 16 in agriculture; whereas in other industries, the minimum age for using such saws is 18 years. Children who work on a farm owned or operated by their parents can do particularly hazardous work at any age, no matter how young.[336] The disparate treatment of child agricultural workers is particularly troublesome in light of federal data indicating agriculture is the most dangerous industry open to young workers.[337]

States have the power to provide stronger labor protections than federal law, particularly for young workers. However, the four states where Human Rights Watch conducted research fail to provide any additional protections to child farmworkers. There is no general child labor law in North Carolina. Child labor laws in Kentucky and Tennessee specifically exempt agricultural workers, [338] and Virginias child labor law is no more protective than federal law. [339] Laws governing wages and hours in North Carolina, Kentucky, and Virginia do not apply to agricultural workers, [340] and Tennessee does not have state-level wage laws.

Under the FLSA, the US Department of Labor (DOL) is charged with determining what jobs are hazardous and therefore prohibited for children under certain minimum ages, known as the hazardous occupations orders. [341] The list of occupations deemed particularly hazardous for children working in agriculture is decades-old and inadequate. [342] In particular, the list leaves off hazardous tasks associated with tobacco production and curing. The list of non-agricultural hazardous occupations was updated in 2010. [343]

In 2011, DOL proposed amendments to child labor regulations to update the list of hazardous occupations in agriculture prohibited for children under age 16, based on recommendations made by the National Institute for Occupational Safety and Health (NIOSH). Among other restrictions, [344] the new rules would have prohibited all children under 16 from all work in the tobacco production and curing, including, but not limited to such activities as planting, cultivating, topping, harvesting, baling, barning, and curing. [345] The proposed regulations would not have applied to children working on family farms. DOL withdrew the proposed amendments to the rules in 2012 in response to opposition from some groups representing agricultural interests. [346] DOL has not reintroduced the amendments.

Despite the greater vulnerability of children to the harmful effects of pesticide exposure, federal pesticide regulations fail to provide children with special consideration. The US Environmental Protection Agency (EPA), which oversees the registration, distribution, sale, and use of pesticides, issues the Worker Protection Standard, a federal regulation intended to reduce the risks of illness or injury resulting fromoccupational exposures to pesticides.[347] The Worker Protection Standard sets no minimum age for mixing or applying pesticides, although regulations set by DOL under the FLSA prohibit children under 16 from handling the most toxic pesticides.[348]

Federal regulations also establish restricted-entry intervals (REIs), the period of time after a pesticide's application during which workers should not be in the treated areas without protective equipment. [349] However, restricted-entry intervals are set using a 154-pound adult male as a modelthey are not adapted for children. A 2003 study of children with acute occupational pesticide-related poisoning found that 26 percent of ill children in agriculture were exposed despite compliance with restricted-entry interval requirements, suggesting, according to the authors, that longer intervals may be required to protect youths. [350] The Worker Protection Standard and the REI regulations are formulated with adultsand only adultsin mind.

A process to revise the Worker Protection Standard has been ongoing for more than a decade, and in 2013, the EPA announced that it would propose revisions to the rule in 2014. The new regulations will likely set a minimum age for workers to mix and apply pesticides.[351]

Few federal occupational safety and health regulations protect child farmworkers. The Occupational Safety and Health Administration

(OSHA) within DOL is charged with establishing and enforcing standards to promote safe and healthy working conditions for all workers. Federal safety and health regulations include general industry standards, [352] most of which are exempt for agricultural workers, [353] and agriculture standards. [354] Standards for agriculture include the Field Sanitation Standard, which requires agricultural employers to provide adequate drinking water, hand-washing facilities, and toilets [355]; tractor regulations; and rules for safety with agricultural equipment. Even these limited protections do not apply to workers on small farms; the US Congress annually limits the application of the Occupational Safety and Health Act by exempting from all enforcement activity any farm that employs 10 or fewer employees and has not had an active temporary labor camp within the last 12 months. [356]

OSHA can rely on its so-called general duty clause where standards for agriculture are insufficient. [357] The general duty clause is a requirement in the Occupational Safety and Health Act that each employer must provide each employee a job and a place to work free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees. [358]

Individual states may develop and operate their own occupational safety and health programs, known as State Occupational Safety and Health Plans, which must be approved by federal OSHA. Once in place, they supplant (with limited exceptions) direct federal OSHA enforcement in that state. Under federal law, states must adopt standards that are at least as effective as federal standards. [359] and according to OSHA, most states adopt standards identical to those in place at the federal level. [360] All four states covered in this report operate State Plans, but none have laws or regulations on occupational health and safety that provide greater protections for agricultural or child workers than federal standards.

The Wage and Hour Division of DOL is charged with enforcing the Fair Labor Standards Act and the Migrant and Seasonal Agricultural Worker Protection Act. Wage and Hour investigators are stationed across the US and are authorized to conduct investigations and determine compliance with child labor and the other provisions of the FLSA. As noted above, the weak protections for child farmworkers in federal labor laws enable most employers to hire child workers legally.

In 2010, Human Rights Watch documented poor enforcement of child labor laws in agriculture by the Wage and Hour Division.[361] Since 2010, the division has hired additional investigators and added multilingual investigators and at the end of 2013, had 1,040 investigators (compared to 894 in April 2010).[362] In 2013, DOL conducted 201 investigations of agricultural employers under the Fair Labor Standards Act, and 1,227 cases under the Migrant and Seasonal Agricultural Worker Protection Act, spending a total of 94,059 hours on agricultural investigations. In 2013, DOL found a total of 36 cases of child labor violations involving 62 children in agriculture, 5 percent of all child labor cases that year.[363]

The hot goods provision is another enforcement tool. The provision prohibits the shipment in interstate commerce of any goods produced in violation of minimum wage, overtime, or child labor requirements. [364] It can be extremely effective, particularly in agriculture, in that it allows the Wage and Hour Division to seek temporary restraining orders preventing the movement of tainted goods, incentivizing companies, growers, and other affected businesses to cooperate with the division. Such cooperation has included future compliance agreements and arrangements for ongoing monitoring. Though use of the hot goods provision increased in 2013, it remains an exceptional law enforcement tool: the division invoked the provision only once in 2012 and five times in 2013. [365]

The enforcement of health and safety laws and regulations concerning farmworkers is piecemeal. DOLs Wage and Hour Division is responsible for enforcing violations of the hazardous occupations orders across all industries. The Wage and Hour Division also enforces OSHAs Field Sanitation Standard, but only in states where OSHA has jurisdiction; state agencies are responsible for enforcement of the Field Sanitation Standard when states have adopted State Occupational Safety and Health Plans. [366] In all four states where Human Rights Watch conducted research, state agencies are responsible for enforcement of the standard. The EPA delegates enforcement of the Worker Protection Standard to state agencies. The EPA reported conducting 3,552 agricultural inspections in 2012 to investigate compliance with the Worker Protection Standard, [367] and found 1,218 violations of the rule, most often related to posting and training requirements. [368]

The US is one of the top producers of unmanufactured tobacco in the world, behind China, Brazil, and India.[369] Approximately 5.8 trillion cigarettes are consumed around the world annually.[370] China is by far the largest market, accounting for nearly one-third of global consumption, but it is almost exclusively operated by a state monopoly, China National Tobacco. Excluding China, two-thirds of world industry volume in cigarettes and other tobacco products is produced by four major global tobacco companies: Philip Morris International (PMI), British American Tobacco (BAT), Japan Tobacco Group (JT), and Imperial Tobacco Group.[371] In the United States, the largest manufacturing companies are Philip Morris USA (PM USA, a subsidiary of Altria Group), Reynolds American, and Lorillard.

All of these companies publicly report that they do not own tobacco farms but purchase tobacco directly from tobacco growers or from leaf suppliers from many countries around the world, including the United States. In addition, the worlds largest leaf merchant companies, Alliance One and Universal Corporation, which, among other business operations, supply leaf tobacco to these and other tobacco manufacturers around the world, also purchase tobacco leaf from growers in the US.

Some of these companies have a stated policy concerning child labor. All of the companies formally acknowledge certain standards found in International Labour Organization conventions. However, several companies appeared to apply standards, including a standardized industry program known as the US Tobacco Good Agricultural Practices Program, in their US operations that only require compliance with US law, while requiring adherence to ILO standards, including concerning child labor, in operations outside the US. As noted above, US child labor law falls well below international standards and fails to adequately protect children.

From the information supplied to Human Rights Watch, Philip Morris International has developed the most detailed and protective set of policies and procedures, including training and policy guidance on child labor and other labor issues which it is implementing in its global supply chain. PMI has also developed specific and expansive lists of hazardous tasks that children under 18 are prohibited from doing on tobacco farms, which include most tasks in which children come into prolonged contact with mature tobacco leaves, among other hazardous work.

Japan Tobacco Group stated that it is actively developing its child labor policies, including through cooperation with ILO experts on child labor, although it allows children older than 15 to perform a range of tasks in tobacco farming, including hazardous tasks, if

children receive proper training and safety equipment, and its Agricultural Labor Policy defers to national law in the event of differences in the policy and national laws. Alliance One also developed a child labor policy and measurable standards for its implementation based on ILO principles, but in the information provided to Human Rights Watch, did not specify whether it considers certain tasks hazardous beyond those established in national laws.

The information shared by Imperial Tobacco Group with Human Rights Watch also did not specify how the company interprets or implements international child labor standards in practice in the US or their global supply chains. BAT provided to Human Rights Watch more detail on how it interprets international child labor standards, but only specified a small range of tasks that it considers hazardous.

From the information made available to Human Rights Watch, Altria Group does not have a separate child labor policy but requires entities in its supply chain to maintain compliance with international minimum age standards, and expects growers and suppliers in the US to refrain from employing children under 18 in hazardous occupations as defined under US law. R.J. Reynolds Tobacco, responsible for leaf purchasing for all Reynolds American manufacturing subsidiaries, also does not have a specific child labor policy. Reynolds American states that it requires that growers with whom the company directly contracts respect national laws, but according to information shared with Human Rights Watch, apparently does not have similar expectations for other suppliers in the supply chain. [372]

Lorillard does not contract directly with any farms in the US and relies on its suppliers, Alliance One and Universal, to have policies and procedures in place concerning child labor. Lorillard does not directly monitor the treatment of workers in its supply chain.[373] Universal does not have a stated child labor policy, but told Human Rights Watch that it agreed with ILO standards on minimum age and the worst forms of child labor and commits itself to the relevant policies established by companies that purchase tobacco from it.[374]

It is important to note that company policies generally prohibiting child labor do not prohibit all work by children under age 18. As noted above, under international standards, the term child labor refers to work done by children below the minimum age of employment or under hazardous conditions. An effective child labor policy should specify in detail what types of work are considered hazardous and therefore prohibited. None of the companies identified in this report have policies that explicitly prohibit children under 18 from all work in which they have direct contact with tobacco in any form, as Human Rights Watch recommends, based on our research findings and international standards.

As noted above, the UN Guiding Principles on Responsible Business details basic steps companies should take to respect human rights including to avoid causing or contributing to adverse human rights impacts through their own activities and to seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products, or services by their business relationships, and mitigating abuses if they occur. [375] Business relationships are understood to include relationships with business partners, entities in its value chain, and any entity directly linked to its business operations, products, or services.

To achieve effective due diligence in the supply chain, companies should have a policy commitment to meet their responsibility to respect human rights; effective processes to identify, prevent, mitigate, and account for how they address their impacts on human rights; and processes to remediate any adverse human rights impacts a company causes or to which it contributes. The Guiding Principles also state that for businesses to gauge actual or potential human rights risks in their own activities or through their business relationships, businesses should draw on internal and independent external human rights expertise and involve meaningful consultation with potentially affected groups and other relevant stakeholders.[376]

When preparing this report, Human Rights Watch sent letters to the 10 companies listed above, asking questions about their child labor policies, worker protection policies, as well as procedures for monitoring for child labor and human rights abuses in the companys supply chain, including both on farms with which they directly contract as well as in other parts of their supply chain, for example when purchasing through leaf merchant companies. Human Rights Watch also requested meetings with each of the companies. Subsequently, Human Rights Watch sent additional letters in March and April 2014. All of the letters sent by Human Rights Watch can be found as an appendix to this report available on the Human Rights Watch website. [377]

Nine companies responded to Human Rights Watchs initial letters. Copies of those responses can be found in the appendix. Relevant information from each companys response to Human Rights Watch and from the companys website is also included below. The company responses varied widely, with some providing extensive detail on their policies and practices and others focusing exclusively on training and contractual expectations to ensure compliance with US law. China National Tobacco did not respond to the letter and did not return calls or emails from Human Rights Watch.

In addition, Human Rights Watch met with or spoke by phone with executives from each of the companies except China National Tobacco, who did not respond to Human Rights Watchs requests for a meeting, and Lorillard and Imperial Tobacco Group, who declined to meet with Human Rights Watch. [378]

Most, although not all, of the tobacco manufacturing and leaf merchant companies whom Human Rights Watch contacted for this report had child labor policies in place, as detailed below.

Altria Group, headquartered in Richmond, Virginia, is the parent company of three US tobacco companies, including Philip Morris USA, the largest cigarette company in the US, which has approximately half of the U.S. cigarette market share, and manufactures brands such as *Marlboro*, *Basic*, *L&M*, *Parliament*, and *Virginia Slims*.[379] Altria Client Services (ACLS), writing on behalf of PM USA and other Altria Group tobacco companies, told Human Rights Watch that it contracts directly with US tobacco growers and buys tobacco from tobacco suppliers who source both domestically and internationally, and that a significant majority of ACLS tobacco is sourced in the US.[380]

Concerning child labor, ACLS told Human Rights Watch that its grower and supplier contracts require US tobacco growers to refrain from employing anyone under 18 in hazardous occupations as defined by the US Secretary of Labors list of hazardous occupations, which legally apply to all children under 16, and include driving a vehicle transporting passengers, riding on a tractor as a passenger, and handling or applying category I (the most toxic) agricultural chemicals.[381] Outside of the US, Altria Group requires growers and suppliers to comply with the minimum age requirements prescribed by applicable laws or the International Labour Conventions, whichever is higher.[382]

In letters and a meeting with Human Rights Watch, ACLS also shared information on other relevant policies and procedures, including its Good Agricultural Practices (GAP) program in the US as well as its participation in the US Tobacco GAP program, described below. ACLS also provided information to Human Rights Watch on its monitoring of its child labor and other policies in the US and internationally, noting that it had conducted assessments of all direct-contracted growers in the US in 2011 to 2013.[383]

In response to the recommendations concerning child labor outlined in this report, Altria Group stated that it believed the recommendation is counter to current farming practices in the US and at odds with certain communities where family farming is a way of life. Altria Group committed to work through the Farm Labor Practices Group multi-stakeholder initiative in North Carolina regarding child labor as well as education and training for growers, farm labor contractors, and workers, and to enhance its monitoring of farms to better quantify child labor and relevant circumstances on our contracted farms.[384]

BAT is a leading global tobacco company with products sold in around 180 markets.[385] BAT products account for 13 percent of the global cigarette market, and an even greater percentage of the global market outside of China.[386] BAT has more than 200 cigarette brands in its portfolio, including *Pall Mall*, the third largest cigarette brand in the world.[387] BAT owns a 42 percent stake in the US tobacco manufacturing company Reynolds American.[388] BAT stated that about 2.5 percent of its global leaf purchases are sourced from the US through third-party leaf suppliers, including Reynolds American.[389]

In a January 2014 letter to Human Rights Watch, BAT stated that it does not employ children in any of its direct operations and that it aims to apply its commitment to protecting children from labor exploitation in its global supply chain, drawing on guidance from the ILOs Minimum Age Convention and Worst Forms of Child Labor Convention.[390] BATs Child Labor Policy states that the company will comply with all relevant and applicable local and international labour regulations, treaties, conventions and principles relating to the protection, welfare and health & safety of children.[391] BAT also states that the welfare and health & safety of children are paramount at all times, that farm work should not conflict with or impede childrens proper educational development including school attendance, and that [no] farm activity that could be considered to put children at risk is undertaken by children. Work activities BAT considers unacceptable for children include long hours and activity that could put children at risk, including driving tractors and lifting heavy loads, and BAT requires all pesticides and other dangerous material need to be out of reach of children.[392]

In its letter to Human Rights Watch BAT did not specify other tasks or work that BAT considers hazardous for children in the United States or other countries. [393] Concerning all workers, including child workers, and exposure to nicotine, BATs website states:

Regarding expectations for and monitoring of its suppliers, BAT relies on a program called the Social Responsibility in Tobacco Production (SRTP) program, adopted by a number of tobacco manufacturers (see Imperial Tobacco Group, below), which sets minimum performance levels for contracted leaf growers on agricultural practices as well as labor, child labor, occupational health, and other issues.[395] Concerning child labor, since 2012 the SRTP program has included the statement: formal reference is given to the treatment of child labour in the context of ILO conventions 138 and 182.[396]

BAT requires all of its suppliers, including in the US, to act in accordance with the SRTP program and educate farmers and workers on the program and monitor progress.[397] Under the program, suppliers carry out self-assessments and a monitoring group conducts assessments of suppliers reports.[398] BAT states that the 2013 SRTP child labor score for the companys US suppliers was 98 percent.[399]

According to its website, the UK-based Imperial Tobacco Group operates in more than 160 countries worldwide and manufactures cigarette brands that are among the most popular in the world, including *Davidoff* and *Gauloises*.[400] The company also states it is the global leader in fine cut tobacco and papers and has exclusive rights to sell all luxury Cuban cigars.[401] Imperial Tobacco Groups 2013 annual report recorded a 5.8 percent global market share.[402]

Imperial Tobacco Group does not have a separate child labor policy but stated in a January 2014 letter to Human Rights Watch that the company and its subsidiaries do not employ children and that it works with suppliers to encourage their compliance with international standards on child labor. This includes: freedom for children from any work that subjects a child to economic exploitation, is hazardous, interferes with the childs education, or is harmful to a childs health or physical, mental or social development. [403] It is not clear from the information available to Human Rights Watch how Imperial Tobacco Group applies these definitions to actual working conditions in its supply chain, including which types of work Imperial Tobacco Group considers harmful or hazardous.

Imperial Tobacco Group stated that it had not received reports of child labor concerning its suppliers, but that given the global incidence of child labour in agricultural supply chains, we understand that it is an issue that we must address. [404] Imperial Tobacco Group participates in the Social Responsibility in Tobacco Production (SRTP or SRiTP) program, described above, which applies to all of its global suppliers, and also gives guidance to and measures suppliers on adherence to ILO Minimum Age and Worst Forms of Child Labor Conventions. Imperial Tobacco Group monitors suppliers self-assessments and adherence to the SRiTP programs standards. [405]

Imperial Tobacco Group reported that less than 5 percent of the tobacco used in its products is purchased in the United States through international leaf merchants. Imperial Tobacco Group representatives declined to meet with Human Rights Watch.[406]

Japan Tobacco Group (JT) described itself as a leading global tobacco company, with operations in over 70 countries, and an estimated 15 percent global market share, outside of China. [407] Its leading brands include *Winston*, *Camel*, *Mevius* (formerly *Mild Seven*), and *Benson & Hedges*. JTs businesses include a Japanese domestic tobacco business and Japan Tobacco International (JTI), headquartered in Geneva. [408]

JTIs Agricultural Labor Policy (ALP), which applies to all of its direct-contracted growers, includes child labor elimination, and states that children shall not carry out activities such as crop harvesting or other activities related to physically handling green leaf tobacco, carrying heavy loads, or those involving handling or application of crop protection agents.[409] The policy allows children ages 16 and above to carry out such tasks, where national law permits it, but requires the health, safety, and moral of the children to be fully protected, including [by] comprehensive specific training.[410] Concerning nicotine poisoning, JTI requires growers to make workers aware of the risks of GTS and apply reasonable measures to limit its risk, in line with JTI guidance supplied to growers. The ALP specifies that in case of a conflict between the ALP and local legislation, local legislation will prevail.[411]

In a February 2014 letter to Human Rights Watch, JT stated that JTIs contracts with US tobacco growers specify that the Producer undertakes not to use, at any time and for any purpose, any kind of child labor and/or forced labor [as defined by the applicable legislation and ILO conventions] for the growing, harvesting, curing, classifying, and baling of [] tobacco.[412]

JTI will monitor the implementation of the ALP through a Know Your Grower (KYG) program, which it has begun rolling out in different countries, with a plan for implementation throughout its supply chain, including the US, by 2018. [413] JTI told Human Rights Watch the company has not implemented the ALP with leaf supply companies and other intermediaries in its supply chain, but will do so after the implementation of KYG. [414]

JTI also participates in the US Tobacco Good Agricultural Practices program, and engages in the North Carolina Farm Labor Practices Group (both described below) in the US. JTI stated that it partners with the ILO and other international organizations to address the fundamental causes of child labor.[415]

In response to Human Rights Watchs recommendations outlined in this report, JTI indicated that it believes many activities can be safely carried out on a [tobacco] farm by young people between 16 and 18, and stated that JTI would seek to determine themselves the risks associated with different tobacco farming activities. JTI also committed to continue the community support in the areas where they purchase tobacco in the US.[416]

The Lorillard Tobacco Company, a subsidiary of Lorillard, is the oldest continuously manufacturing tobacco company in the United States and the third-largest tobacco manufacturer in the country. The Greensboro, North Carolina-based company manufactures several well-known brands, including *Newport*, the top selling menthol and second largest selling cigarette in the US.[417]

Based on the information available to Human Rights Watch, Lorillard does not appear to have a separate child labor policy, but has policies concerning compliance with national child labor laws. [418] In a January 2014 letter to Human Rights Watch, Lorillard stated that it relies on the implementation of policies and procedures and monitoring by our tobacco suppliers to ensure that there are no child labor law violations. Lorillard contracts with Alliance One and Universal for the purchase of tobacco leaf in the US. [419]

Lorillard stated that, in response to the December 2013 letter from Human Rights Watch, it approached Alliance One and Universal and requested those companies to abide by their own stated child labor and social responsibility policies and to support efforts to improve workplace conditions for farm workers. [420] Lorillard also stated that because it does not contract directly with tobacco growers, it does not directly monitor the treatment of laborers on tobacco farms but that it reviews its supplier policies on child labor and other compliance on a regular basis and inquire as to any issues identified. [421]

The January 2014 letter to Human Rights Watch also stated that Lorillard had not received any reports of child labor or other labor violations. [422] Lorillard declined to provide information about the volume of tobacco purchases in the United States. Lorillard also declined to meet with Human Rights Watch, citing the companys indirect relationship with the tobacco farms. [423]

Philip Morris International (PMI), a United States-based tobacco company with operations based in Lausanne, Switzerland, [424] describes itself as the leading international tobacco company with an estimated 16 percent share of the total cigarette market outside of the United States. [425] PMI owns seven of the worlds top 15 cigarette brands, including *Marlboro*, the worlds leading brand and sells its products in over 180 markets. [426] According to PMI, the company contracts with more than 3,000 tobacco growers in the United States, supplying approximately 10 percent of PMIs global leaf purchases. [427]

Of the companies contacted by Human Rights Watch for this report, Philip Morris International has the most detailed child labor policy and articulated meaningful progress to develop and implement policies and procedures to address child labor in its supply chain. [428] PMIs detailed and specific child labor policy, a component of its Agricultural Labor Policy (ALP), prohibits work for children under 15, or the minimum age set by a countrys laws, whichever is higher, with the exception of light work on family farms. PMI also prohibits children under 18 from engagement in hazardous work. [429]

PMI listed the hazardous activities that children of any age should not perform, including: driving vehicles, using sharp tools in movement, , handling and applying pesticides and fertilizers, carrying heavy loads, working at heights, working long hours that interfere with health and well-being, working in extreme temperatures, working at night, harvesting, topping and pulling suckers off of tobacco plants.[430]In a February 2014 meeting with Human Rights Watch, PMI officials gave several examples of tasks that the company did not consider hazardous for children, including weeding, handling seedlings, watering seedbeds, and selecting tobacco leaf after plants have dried.[431]

PMI has developed detailed guidance materials, training materials and programs, and internal and external monitoring procedures specific to each market in which it works to facilitate implementation of the ALP, including the child labor policy in its global supply chain. [432] PMI also engaged Verite, a non-profit organization, to provide PMI with experience, advice and hands-on support in the creation, implementation and monitoring of the ALP Program. [433]

In early 2012, PMI incorporated its ALP Code standards in contractual arrangements with all growers in the United States and conducted training sessions to cover all of its contracted farms. PMI reported to Human Rights Watch that it severed ties with 20 growers who stated that they could not comply with the ALP standards on child labor. [434] PMI noted that its ALP code maintains generally stricter standards than defined in US federal law, both in terms of the types of activities deemed hazardous and the age limits for performing such activities. [435]

With regard to training and implementation of the ALP worldwide, since 2001, over 3,700 PMI employees (and our suppliers) and nearly 500,000 tobacco growers in more than 30 countries have been trained on ALP principles and standards for the farms where PMI sources tobacco. [436] PMI also undertook to identify priority issues on farms and to systematically address issues and measure [the] progress on a long-term basis. [437] Children involved in hazardous work falls under the companys prompt action category. [438]

In a February 2014 written response to Human Rights Watch, PMI provided extensive detail about implementation of other aspects of the ALP in the US and globally. [439] PMI also shared with Human Rights Watch details about its monitoring of growers adherence to the

ALP in the US and globally, including plans to systematically monitor 100 percent of its farms in the US by 2015.[440] PMI participates in the multi-stakeholder Farm Labor Practices Group and stated that it has assumed leadership roles in subgroups created to address specific issues.[441]

In response to Human Rights Watchs findings and recommendations, PMI stated that it would broaden its internal monitoring effort to visit all contracted farms in the US, in addition to the third-party assessment during the 2014 peak season. PMI also stated that it did not agree with Human Rights Watchs recommendation to extend restrictions on children working to all stages of the tobacco crop. PMI stated that it would welcome a strengthening of the US regulatory framework to align it with [PMI] and ILOs international standards, and would support a sector-wide approach to child labor in tobacco farming. PMI also described initiatives underway in the US, including a higher education scholarship program for children of farmworkers in 2015, and a summer school for migrant farm children. [442]

Reynolds American (RAI) is the parent company of R.J. Reynolds Tobacco Company (R.J. Reynolds), the second-largest US tobacco company, and Santa Fe Natural Tobacco Company, producer of Natural American Spirit cigarettes, among other companies. [443] Reynolds products include two of the best-selling cigarettes in the US: *Camel* and *Pall Mall*. [444] As noted above, BAT holds a 42 percent stake in Reynolds American.

R.J. Reynolds, which purchases tobacco leaf on behalf of all Reynolds American tobacco product manufacturing subsidiaries, does not have a specific child labor policy that it implements throughout the supply chain, but stated to Human Rights Watch that it addresses child labor through its expectations that the growers with whom it contracts directly comply with national law. It articulates these expectations through the contracts with growers and provides training and educational resources to growers and workers on health, safety, and other issues to help them operate in a safe and legally compliant manner. [445] R.J. Reynolds did not articulate to Human Rights Watch any policies concerning child labor or worker protections expectations for non-contract farms supplying tobacco to the company through intermediaries, namely leaf merchant companies.

Both the R.J. Reynolds letter to Human Rights Watch and the Reynolds American website indicate that the businesses distance themselves from the labor practices in their tobacco supply chain, stating: Because farm workers are not our employees, we have no control over their recruitment, their hiring, or the terms and conditions of their employment, [446] and Because farm workers are not our employees, we have no direct control over their sourcing, their training, their pay rates, or their housing and access to human services. [447] Instead, the company said it focuses on ensuring that its suppliers have the training and resources they need to do the right thing for workers in the supply chain. [448] The companys website also states that it seeks to Support and respect the protection of internationally proclaimed human rights. [449]

According to its letter to Human Rights Watch and its website, R.J. Reynolds hired a third party group to audit the growers contracting with the company in North Carolina in 2011 and 2012. According to the auditors report, auditors assessed 408 growers and interviewed 922 workers (about 22 percent of the workforce). [450] R.J. Reynolds summarized the audit as encouraging in the areas of worker treatment and safety, but revealed that further work is needed in the area of record-keeping. [451] Concerning child labor the audit found three instances of children under 18 working for hire. [452]

In 2007, the Farm Labor Organizing Committee (FLOC), a farmworker union based in North Carolina, began calling on Reynolds American and R.J. Reynolds to meet with farmworker representatives concerning occupational health and safety hazards, unsafe housing, wage problems, and other human rights concerns for tobacco workers in the state. FLOC has also urged the companies to guarantee freedom of association and collective bargaining for tobacco workers in their supply chain. For many years, the company declined FLOCs requests to meet, arguing in an open letter published on their website that they were not the appropriate party to negotiate any collective bargaining agreement with FLOC.[453]

At a 2011 shareholder meeting, following publication of a joint report by FLOC and Oxfam America on human rights abuses on tobacco farms in North Carolina, [454] R.J. Reynolds announced it would monitor working conditions on tobacco farms from which it sourced tobacco, and participate in the multi-stakeholder Farm Labor Practices Group. In 2012, after another year of public campaigning, Reynolds management agreed to meet directly with FLOC. Negotiations between Reynolds and FLOC are ongoing. [455]

Alliance One International describes itself as a leading independent leaf tobacco merchant serving the world's largest cigarette manufacturers. According to its website, Alliance One selects, purchases, processes, packs, stores, and ships leaf tobacco, buying tobacco in more than 45 countries. [456] Alliance One reported that in 2013 it contracted with 1,074 growers in the United States, including 446 in Tennessee, 397 in North Carolina, 226 in Kentucky, and 5 in Virginia. For the 2013 fiscal year, PMI, JTI, Imperial Tobacco Group, and China National Tobacco each accounted for more than 10 percent of Alliance One revenues. In 2013, Alliance One delivered approximately 19 percent of its tobacco sales to customers in the United States. [457]

In a March 2014 letter to Human Rights Watch, Alliance One stated that its child labor policy, a component of its agricultural labor policy, is based on ILO principles. The policy states that there shall be no employment or recruitment of child labor, that no child under 18 is involved in hazardous work, and that 15 is the minimum age for work, unless national law sets a higher standard. Children 13 to 15 may be involved in light work on a family farm. The company did not specify whether it defines specific tasks hazardous beyond those established in national laws. [458] In its contracts with growers in the US, however, Alliance One requires that growers do not use child labor and that the grower and subcontractors will at all times be in strict compliance with all Federal and State laws, statutes, regulations and standard[s] regarding child labor. [459]

Globally, Alliance One states that its child labor principles and expectations are communicated directly to its contracted farmers, generally by the companys Field Technicians and Agronomy Area Managers, based on country-specific communication plans. Alliance One also relies on farm visits, farmer meetings, media, brochures, collaboration with NGOS, industry organizations, and governments to communicate its child labor expectations. [460] In addition, Alliance One states that globally Field Technicians are trained to look for evidence of child labor use during each farm visit and to remind farmers of the importance of not allowing this practice. Alliance One reported that its personnel visit approximately 10-12 farms in the United States per week during the growing season. [461] In its detailed written response to Human Rights Watch, Alliance One did not describe any third party independent monitoring of its child labor policy or other policies. [462] Alliance Ones letter to Human Rights Watch provided details on other aspects of its Agricultural Labor Policy and its implementation. [463]

According to Universal Corporations website, the company is the worlds leading leaf tobacco merchant and processor, based on volume, conducting business in more than 30 countries. Universal's business includes selecting, buying, shipping, processing, packing, storing, and financing of leaf tobacco for sale to, or for the account of, manufacturers of tobacco products. [464] Universal states that the company handled between 25 and 35 percent of the flue-cured and burley tobacco produced in North America, mainly from the US, in the 2013 fiscal year. [465] Universal Corporation reports that globally its five largest customers are PMI, Imperial Tobacco Group, China National Tobacco, BAT, and JTI. In the aggregate, these customers accounted for more than 60 percent of Universals consolidated revenues for each of the past three fiscal years. [466]

Universal does not have a child labor policy, but told Human Rights Watch that it commits itself to the relevant policies established by companies that purchase tobacco from it. [467] In a March 2014 letter to Human Rights Watch, Universal stated that it has agreed with the fundamental positions contained in the International Labor Organizations Convention 138 on minimum age and Convention 182 on the worst forms of child labor. [468] Universal acknowledged that its approach presents challenges as many regions around the world have conflicting laws about minimum age or the definitions of child labor and hazardous work (or there are no laws at all). [469]

Universal states that in its contracts with tobacco growers in the US it expressly forbids our growers to employ workers under the applicable minimum legal age for the specific work performed. [470] Universal also noted, as have some other tobacco manufacturing companies whom Human Rights Watch contacted in conjunction with this report, that it has limited agronomy personnel for support, training, and monitoring of its contracted growers in the US and that universities agricultural extension services fulfill these functions. [471] Universal reported that outside of the US, its agronomy services include programs on elimination of child labor. [472]

Universal also told Human Rights Watch that it helped develop the US Tobacco GAP Program, described below, which requires tobacco growers compliance with US federal and state laws and that it participates in the Farm Labor Practices Group.

Tobacco product manufacturers, leaf merchants, growers, government agencies, universities, and agricultural organizations have together developed an industry-wide set of standards for tobacco production in the United States, called the US Tobacco Good Agricultural Practices (GAP) Program. The US Tobacco GAP is defined as agricultural practices which produce a quality crop while protecting, sustaining or enhancing the environment with regard to soil, water, air, animal and plant life as well as protecting and ensuring the rights of farm laborers. [473] One of the goals of the US Tobacco GAP was to reduce the burden on growers, who typically contract with multiple buyers, to meet different companies agricultural practice and record keeping requirements. A handbook published in 2012 contains guidelines to growers for crop management, environmental management, and labor management, and has been endorsed by many of the companies approached by Human Rights Watch. [474]

The US Tobacco GAP approach to labor emphasizes growers obligations under US law, and requires growers to provide a safe work environment, recognize workers rights to freedom of association, meet minimum standards for housing, and train workers on health and safety hazards, including nicotine poisoning. [475] Regarding child labor, the GAP Program handbook requires growers to: Follow all relevant contractual and legal requirements concerning the regulations on child labor, and advises growers to review federal and state laws governing the employment of children under 18 in agriculture. [476] A number of companies noted to Human Rights Watch that starting in 2013, third party auditors will be used to evaluate grower compliance with US GAP on an annual basis. [477]

Since April 2012, three large tobacco product manufacturers began participating in a North Carolina-based multi-stakeholder initiative, called the Farm Labor Practices Group (FLPG).[478] The group now includes several leading tobacco manufacturers and leaf merchantsAltria Group, Philip Morris International, Reynolds American, Japan Tobacco International, Alliance One, and Universalalong with tobacco grower representatives, FLOC, the Interfaith Center on Corporate Responsibility (ICCR), and US Department of Labor representatives.

Many of the companies specifically mentioned their participation in the FLPG in their written responses to and in meetings with Human Rights Watch. The aim of the group, which has met several times since its inception, is, according to Altria Group, to help both farmers and farmworkers better understand and comply with applicable labor laws and regulations, and to foster improved farm labor practices, where needed. [479] According to Universal, Significant issues identified by the FLPG to date include the use of disreputable labor contractors, the protection of undocumented migrant labor, and housing conditions for farm laborers and that the FLPG had not identified child labor as a significant problem in U.S. tobacco farming relative to other issues being discussed. [480] There are sub-groups assigned to specific topics such as public policy, training and education, and grievance procedures. [481] At the invitation of some members of the group, Human Rights Watch staff gave a presentation to the group on April 10, 2014 concerning the findings and recommendations of this report. Following the presentation, FLPG members agreed to form a working group on child labor.

Seven of the ten companies contacted for our report are members of the Eliminating Child Labour in Tobacco Growing Foundation (ECLT Foundation), a Geneva-based organization devoted to preventing child labor in tobacco agriculture. The organizations US\$6.4 million budget is funded through contributions primarily from tobacco and tobacco leaf companies that sit on the foundations board. [482] The foundation carries out projects in tobacco-growing countries, including Kyrgyzstan, Tanzania, Malawi, Mozambique, and Uganda, (and had projects in Zambia and the Philippines in the recent past), to withdraw children from tobacco farmwork, improve access to education, and strengthen economic livelihoods in tobacco-producing communities. ECLT Foundation initiatives to provide children with alternatives to tobacco work include model farm schools in Tanzania, after-school education programs income-generation projects, and occupational safety and health advocacy in Malawi, holiday camps for children of tobacco workers in Kyrgyzstan, and scholarship programs in Uganda. [483] The Foundation does not carry out any projects in the United States.

This report was researched and written by Margaret Wurth, researcher in the Childrens Rights Division, and Jane Buchanan, associate director of the Childrens Rights Division, at Human Rights Watch. The report was edited by Jo Becker, advocacy director of the Childrens Rights Division; James Ross, legal and policy director; and Babatunde Olugboji, deputy program director. Joe Amon, director of the Health and Human Rights Division; Zama Coursen-Neff, director of the Childrens Rights Division; Arvind Ganesan, director of Business and Human Rights Division; and Grace Meng, US program researcher, also reviewed and commented on the report.

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- [58] Ibid.
- [59] Human Rights Watch interview with Dr. Thomas Arcury, director of the Center for Worker Health at Wake Forest School of Medicine, Winston-Salem, North Carolina, May 20, 2013.
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- [70] Ibid; Thomas A. Arcury, Sara A. Quandt, et al., High levels of transdermal nicotine exposure produce green tobacco sickness in

Latino farmworkers, Nicotine & Tobacco Research, vol. 5 (2003), p. 320.

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Smoking 50 Years of Progress: A Report of the Surgeon General. Atlanta: US Department of Health and Human Services, 2014, p. 126, http://www.surgeongeneral.gov/library/reports/50-years-of-progress/50-years-of-progress-by-section.html (accessed March 4, 2014).

- [72] Human Rights Watch group interview with Katrina T., 15, Diego T., 16, and Rafa B,. 16, Greene County, North Carolina, July 3, 2013.
- [73] Ibid.
- [74] Human Rights Watch interview with Joshua D., 13, Wayne County, North Carolina, July 2, 2013.
- [75] Human Rights Watch interview with Sally G., 16, and Marissa G., 14, Wayne County, North Carolina, July 21, 2013.
- [76] Human Rights Watch interview with Jocelyn R., 17, Lenoir County, North Carolina, May 18, 2013.
- [77] Human Rights Watch interview with Estevan O., 15, Lenoir County, North Carolina, May 19, 2013.
- [78] See e.g. Thomas A. Arcury et al., Diagnosed Skin Diseases among Migrant Farmworkers in North Carolina: Prevalence and Risk Factors, *Journal of Agricultural Safety and Health*, vol. 13, no. 4 (2007) pp. 407-418 which found a 57 percent prevalence of inflammatory skin disease, and a 74 percent prevalence of infectious skin disease in a sample of 304 farmworkers in eastern North Carolina. See also, John J. May, Occupational Injury and Illness in Farmworkers in the Eastern United States, *Latino Farmworkers in the Eastern United States: Health, Safety, and Justice*, Thomas A. Arcury and Sara A. Quandt, eds. (New York: Spring, 2009), pp. 80-81.
- [79] Nina F. Abraham, Steven R. Feldman, et al., Contact Dermatitis in Tobacco Farmworkers, *Contact Dermatitis*, vol. 57 (2007), pp. 40-43. See also, Thomas A. Arcury, Quirina M. Vallejos, Mark R. Schulz, Steven R. Feldman, Alan B. Fleischer Jr., Amit Verma, and Sara A. Quandt, Green Tobacco Sickness and Skin Integrity Among Migrant Latino Farmworkers, *American Journal of Industrial Medicine*, vol. 51(2008), p. 198.
- [80] Human Rights Watch group interview with five child tobacco workers, 15-17, Lenoir County, North Carolina, July 23, 2013.
- [81] Human Rights Watch interview with Alberto H., 16, Doug S., 17, and Damian W., 17, Wayne County, Kentucky, September 3, 2013.
- [82] Human Rights Watch interview with Dario A., 16, Clark County, Kentucky, September 4, 2013.
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- [88] Human Rights Watch interview with Estevan O., 15, Lenoir County, North Carolina, May 19, 2013.
- [89] Human Rights Watch interview with Marta W., 10, and Patrick W., 9, Macon County, Tennessee, October 22, 2013.
- [90] Human Rights Watch interview with Andrea D., 16, Shelby County, Kentucky, August 7, 2013.
- [91] Human Rights Watch interview with Henry F., 17, Montgomery County, Kentucky, September 6, 2013.
- [92] Twenty-one children interviewed by Human Rights Watch for this report were not asked about exposure to pesticides.
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- [94] For detailed description of the risks associated with pesticide drift, see: Thomas A. Arcury and Sara A. Quandt, Pesticide Exposure among Farmworkers and Their Families, *Latino Farmworkers in the Eastern United States: Health, Safety, and Justice*, Thomas A. Arcury and Sara A. Quandt, eds. (New York: 2009), p. 109.
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- [96] Human Rights Watch interviews with Cameron M., 18, Monroe County, Kentucky, September 2, 2013.
- [97] Human Rights Watch interview with Andrew N., 16, Macon County, Tennessee, October 22, 2013.

- [98] Human Rights Watch interview with Emilio R., 16, Lenoir County, North Carolina, May 18, 2013.
- [99] Human Rights Watch interview with Lucia A., 17, Lenoir County, North Carolina, May 18, 2013.
- [100] Human Rights Watch group interview with five child tobacco workers, 15-17, Lenoir County, North Carolina, July 23, 2013.
- [101] Human Rights Watch interview with Marta W., 10, and Patrick W., 9, Macon County, Tennessee, October 22, 2013.
- [102] Human Rights Watch interview with Yanamaria W., 14, Warren County, Kentucky, September 2, 2013.
- [103] Human Rights Watch interview with Nicholas V., 14, Lenoir County, North Carolina, May 18, 2013.
- [104] Human Rights Watch interview with Yael A., 17, Greene County, North Carolina, July 3, 2013.
- [105] Human Rights Watch interview with Sally G., 16, and Marissa G., 14, Wayne County, North Carolina, July 21, 2013.
- [106] Human Rights Watch interview with Christian V., 13, Hawkins County, Tennessee, October 24, 2013.
- [107] Human Rights Watch interview with Theo D., 16, Scott County, Virginia, October 25, 2013.
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- [110] Linda A. McCauley, W. Kent Anger, Matthew Keifer, Rick Langley, Mark G. Robson, and Diane Rohlman, Studying Health Outcomes in Farmworker Populations Exposed to Pesticides.
- [111] Catherine Karr, Children's Environmental Health in Agricultural Settings, Journal of Agromedicine, vol. 17, no. 2, (2012), p. 128.
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- [114] Title 40, Code of Federal Regulations (C.F.R.) sec. 170.
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- [117] EPA, Restrictions after Pesticide Applications under the Current WPS, February 20, 2014, http://www.epa.gov/oppfead1/safety/workers/restrictions-after-application.html (accessed March 13, 2014).
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- [123] United States Government Accountability Office, Pesticides on Tobacco: Federal Activities to Assess Risks and Monitor Residues, GAO-03-485, March 2003, http://www.gao.gov/new.items/d03485.pdf (accessed November 21, 2013).
- [124] Human Rights Watch telephone interview with Dr. Thomas Arcury, director of the Center for Worker Health at Wake Forest School of Medicine, February 24, 2014.
- [125] For a review of studies on pesticide exposure in tobacco workers, see Thomas A. Arcury and Sara A. Quandt, Health and Social Impacts of Tobacco Production, *Journal of Agromedicine*, vol. 11, no. 3-4 (2006), pp. 74-76. Studies of organophosphate and carbamate exposure in agricultural workers in Kenya found 26 percent of tobacco workers showed evidence of pesticide poisoning, and study of Malaysian tobacco workers found one-third of workers showed symptoms of organophosphate pesticide exposure.

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- [130] Human Rights Watch interview with Andrea D., 16, Shelby County, Kentucky, August 7, 2013.
- [131] Human Rights Watch interview with Timothy S., 13, Shelby County, Kentucky, August 7, 2013.
- [132] Human Rights Watch interview with Joseph T., 18, Wayne County, North Carolina, July 2, 2013.
- [133] Human Rights Watch telephone interview with Dr. Thomas Arcury, director of the Center for Worker Health at Wake Forest School of Medicine, February 24, 2014. See also, Jeffrey R. Bytomski and Deborah L. Squire, Heat Illness in Children, *Current Sports Medicine Reports*, vol. 2, no. 6 (2007), p. 320 (noting that children are more susceptible than adults to heat illness because of greater surface area to body mass ratio, lower rate of sweating, and slower rate of acclimatization).
- [134] Human Rights Watch interview with Andrew N., 16, Macon County, Tennessee, October 22, 2013.
- [135] Human Rights Watch interview with Lucio F., 12, Montgomery County, Kentucky, September 6, 2013.
- [136] Human Rights Watch interview with Omar B., 15, Macon County, Tennessee, October 22, 2013.
- [137] Human Rights Watch interview with Adriana F., 14, Montgomery County, Kentucky, September 3, 2013.
- [138] Human Rights Watch interview with Jeremiah F., 15, Montgomery County, Kentucky, September 3, 2013.
- [139] Human Rights Watch interview with Theo D., 16, Scott County, Virginia, October 25, 2013.
- [140] Human Rights Watch interview with Nicholas V., 14, Lenoir County, North Carolina, May 18, 2013.
- [141] Human Rights Watch interview with Andrea D., 16, Shelby County, Kentucky, August 7, 2013.
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- [143] Human Rights Watch interview with Isaac S., 18, 2013 (location and exact date withheld).
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- [146] For a state-by-state comparison of workers compensation coverage for agricultural workers, see Farmworker Justice, State Workers' Compensation Coverage for Agricultural Workers, 2009,
- http://www.farmworkerjustice.org/sites/default/files/documents/6.3.a.1State_Workers_Comp_Information_for_Health_Centers_11-09.pdf (accessed March 7, 2014).
- [147] Human Rights Watch interview with Isaac S., 18, 2013 (location and exact date withheld).
- [148] Human Rights Watch interview with Emilio R., 16, Lenoir County, North Carolina, May 18, 2013.
- [149] Human Rights Watch interview with Carla P., 16, Boyle County, Kentucky, September 6, 2013.
- [150] 29 C.F.R. sec, 570.71(a)(1-3).
- [151] Human Rights Watch interview with Pablo E., 17, Green County, Kentucky, September 2, 2013.
- [152] Human Rights Watch interview with Calvin R., 17, Scott County, Kentucky, September 4, 2013.
- [153] Human Rights Watch interview with Jaime V., 18, Hamblen County, Tennessee, October 24, 2013.
- [154] Human Rights Watch interview with Marta W., age 10, and Patrick W., age 9, Macon County, Tennessee, October 22, 2013.
- [155] Human Rights Watch interview with Agustin F., age 15, Boyle County, Kentucky, September 6, 2013.
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- [166] Human Rights Watch interview with Manuel W., 12, Warren County, Kentucky, September 2, 2013.
- [167] Human Rights Watch interview with Ian S., 12, Montgomery County, Kentucky, September 6, 2013.
- [168] Human Rights Watch interview with Lazaro S., 15, Clark County, Kentucky, September 4, 2013.
- [169] Human Rights Watch interview with Gregory T., 9, and Jackie T., 7, Macon County, Tennessee, October 22, 2013.
- [170] Human Rights Watch interview with Marta W., 10, and Patrick W., 9, Macon County, Tennessee, October 22, 2013.
- [171] Human Rights Watch interview with Emily D., 14, Scott County, Virginia, October 25, 2013.
- [172] Human Rights Watch interview with Bridget F., 15, Harrison County, Kentucky, September 5, 2013.
- [173] Human Rights Watch interview with Ricardo M., 14, Shelby County, Kentucky, August 7, 2013.
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- [175] Email from Shane Stephens, Economist, Bureau of Labor Statistics, US Department of Labor to Human Rights Watch, December 13, 2013. Data on nonfatal injuries and illnesses involving days away from work in the crop production industry for 2012 on file with Human Rights Watch.
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- [180] Human Rights Watch telephone interview with Dr. Thomas Arcury, director of the Center for Worker Health at Wake Forest School of Medicine, February 24, 2014.
- [181] Human Rights Watch interview with Fabiana H., 14, Lenoir County, North Carolina, May 18, 2013.
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- [183] Human Rights Watch interview with Santiago H., 16, Lenoir County, North Carolina, May 18, 2013.
- [184] Human Rights Watch interview with Adriana F., 14, Montgomery County, Kentucky, September 3, 2013.
- [185] Human Rights Watch interview with Santiago H., 16, Lenoir County, North Carolina, May 18, 2013.
- [186] Human Rights Watch interview with Yanamaria W., 14, Warren County, Kentucky, September 2, 2013.
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- [188] Human Rights Watch interview with Raul D., 13, Wayne County, North Carolina, July 21, 2013.
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- [193] Human Rights Watch interview with Jocelyn R., 17, Lenoir County, North Carolina, May 18, 2013.
- [194] *Entabacarse* can be loosely translated as to become overcome by tobacco, and was commonly used by the children interviewed for this report to refer to tobacco workers getting sick while working.
- [195] Human Rights Watch interview with Emmanuel P., 18, Wayne County, North Carolina, July 2, 2013.
- [196] Human Rights Watch interview with Jaime V., 18, Hamblen County, Tennessee, October 24, 2013.
- [197] Human Rights Watch interview with Violet R., 19, Lenoir County, North Carolina, May 19, 2013.
- [198] Human Rights Watch interview with Natalie G., 18, Lenoir County, North Carolina, May 18, 2013.
- [199] Human Rights Watch interview with Eli B., 15, Greene County, North Carolina, May 18, 2013.
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- [201] Human Rights Watch interview with Alberto H., 16, Doug S., 17, and Damian W., 17, Wayne County , Kentucky, September 3, 2013.
- [202] Geoffrey M. Calvert et al., Acute Pesticide-Related Illnesses Among Working Youths, 19881999, *American Journal of Public Health*, vol. 93, no. 4 (April 2003), p. 608.
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- [204] Human Rights Watch interview with Nicholas V., 14, Lenoir County, North Carolina, May 18, 2013.
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- [207] Human Rights Watch interview with Ezra B., 15, Lenoir County, North Carolina, May 19, 2013.
- [208] Human Rights Watch interview with Claudio G., 16, Duplin County, North Carolina, July 27, 2013.
- [209] Human Rights Watch interview with Henry F., 17, Montgomery County, Kentucky, September 6, 2013.
- [210] Human Rights Watch interview with Lucia A., 17, Lenoir County, North Carolina, May 18, 2013.
- [211] Human Rights Watch interview with Sally G., 16, and Marissa G., 14, Wayne County, North Carolina, July 21, 2013.
- [212] Human Rights Watch interview with Margarita S., 16, Wayne County, North Carolina, July 21, 2013.
- [213] Human Rights Watch interview with Ricardo M., 14, Shelby County, Kentucky, August 7, 2013.
- [214] Human Rights Watch interview with Blanca A., 14, Lenoir County, North Carolina, May 18, 2013.
- [215] Human Rights Watch interview with Luciano P., 18, Fayette County, Kentucky, September 4, 2013.
- [216] Human Rights Watch interview with Gregory T., 9, and Jackie T., 7, Macon County, Tennessee, October 22, 2013.
- [217] Human Rights Watch interview with Katie P., 15, Greene County, North Carolina, July 24, 2013.
- [218] Human Rights Watch interview with Carla P., 16, Boyle County, Kentucky, September 6, 2013.
- [219] Human Rights Watch interview with Lisandra P., 14, Boyle County, Kentucky, September 6, 2013.
- [220] Human Rights Watch interview with Emilio R., 16, Lenoir County, North Carolina, May 18, 2013.
- [221] Human Rights Watch interview with Raul D., 13, Wayne County, North Carolina, July 21, 2013.
- [222] OSHAs 1987 Field Sanitation Standard, which is enforced by DOLs Wage and Hour Division, requires agricultural employers to provide workers with: (1) Cool and potable drinking water in sufficient amounts, dispensed by single-use drinking cups or by fountains

and readily accessible to all; and (2) One toilet and a handwashing facility for each 20 employees, located within a quarter-mile walk. A farm that employs 10 or fewer employees and has not had an active temporary labor camp within the last 12 months is exempted from OSHA enforcement. Congress exempts small farms from enforcement of OSHA standards by attaching riders to annual appropriation bills. OSHA Field Sanitation Standard (1987), 52 Fed. Reg. 16050 (May 1, 1987), 29 C.F.R. sec. 1928.110.

- [223] US Department of Labor (DOL), Occupational Health and Safety Administration (OSHA), Agricultural Operations: Hazards and Controls, undated, https://www.osha.gov/dsg/topics/agriculturaloperations/hazards_controls.html, (accessed December 11, 2013).
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- [227] 29 C.F.R. sec. 570.35.
- [228] Human Rights Watch interview with Sally G., 16, and Marissa G., 14, Wayne County, North Carolina, July 21, 2013
- [229] Human Rights Watch interview with Danielle S., 16, Clark County, Kentucky, September 4, 2013.
- [230] Human Rights Watch interview with Bridget F., 15, Harrison County, Kentucky, September 5, 2013.
- [231] Human Rights Watch interview with Martin S., 18, Shelby County, Kentucky, August 7, 2013.
- [232] Human Rights Watch interview with Blanca A., 14, Lenoir County, North Carolina, May 18, 2013.
- [233] Human Rights Watch interview with Elena G., 13, Lenoir County, North Carolina, May 18, 2013.
- [234] Human Rights Watch interview with Natalie G., 18, Lenoir County, North Carolina, May 18, 2013.
- [235] Human Rights Watch interview with Jorge P., 16, Hamblen County, Tennessee, October 24, 2013.
- [236] Human Rights Watch interview with Joseph T., 18, Wayne County, North Carolina, July 2, 2013.
- [237] Human Rights Watch interview with Jaime V., 18, Hamblen County, Tennessee, October 24, 2013.
- [238] Human Rights Watch interview with Yanamaria W., 14, Warren County, Kentucky, September 2, 2013.
- [239] Human Rights Watch interview with Isaac S., 18, 2013 (location and exact date withheld).
- [240] Human Rights Watch interview with Claudio G., 16, Duplin County, North Carolina, July 27, 2013.
- [241] Human Rights Watch interview with Andrea D., 16, Shelby County, Kentucky, August 7, 2013.
- [242] Human Rights Watch interview with Elicio F., 15, Lenoir County, North Carolina, May 19, 2013.
- [243] Human Rights Watch interview with Elan T., 15, and Madeline T., 16, Lenoir County, North Carolina, May 19, 2013.
- [244] Human Rights Watch interview with Marta W., 10, and Patrick W., 9, Macon County, Tennessee, October 22, 2013.
- [245] Human Rights Watch interview with Bridget F., 15, Harrison County, Kentucky, September 5, 2013.
- [246] Human Rights Watch interview with Dario A., 16, Clark County, Kentucky, September 4, 2013.
- [247] Human Rights Watch interview with Blanca A., 14, Lenoir County, North Carolina, May 18, 2013.
- [248] Human Rights Watch interview with Natalie G., 18, Lenoir County, North Carolina, May 18, 2013.
- [249] Human Rights Watch interview with Martin S., 18, Shelby County, Kentucky, August 7, 2013.
- [250] Human Rights Watch interview with Isaac S., 18, 2013 (location and exact date withheld).
- [251] Human Rights watch interview with Adelina B., 14, Shelby County, Kentucky, August 7, 2013.
- [252] Employers are exempt from minimum wage requirements if a farm did not utilize more than 500 man days of agricultural labor in any calendar quarter of the preceding calendar year, with a man day defined as any day during which an employee performs agricultural work for at least one hour. Employees are not entitled to minimum wage if: they are immediate family members of their employer; they are principally engaged in the production of livestock; they are local hand harvest laborers who commute daily from their permanent residence, are paid on a piece rate basis in traditionally piece-rated occupations, and worked in agriculture less than 13 weeks during the preceding calendar year; or they are non-local children 16 years or younger who are hand harvesters, paid on a piece rate in traditionally piece-rated occupations, employed on the same farm as their parent, and are paid the same piece rate as those over 16. 29 C.F.R. sec. 780.300. In addition, employers may pay youth under age 20 a lower minimum wage during the first 90 consecutive calendar days after

their initial employment.

- [253] 29 U.S.C. sec. 207(g).
- [254] 29 U.S.C. sec. 213(b)(12).
- [255] 29 U.S.C. sec. 152. As a result, agricultural workers can be fired for joining a labor union or engaging in collective action against an employer.
- [256] Human Rights Watch interview with Henry F., 17, Montgomery County, Kentucky, September 6, 2013.
- [257] Human Rights Watch interview with Jaime V., 18, Hamblen County, Tennessee, October 24, 2013.
- [258] See, for example, John J. May, Occupational Injury and Illness in Farmworkers in the Eastern United States, Latino Farmworkers in the Eastern United States: Health, Safety, and Justice, Thomas A. Arcury and Sara A. Quandt, eds. (New York: Springer, 2009), p. 72.
- [259] Human Rights Watch interview with Agustin F., 15, Boyle County, Kentucky, September 6, 2013.
- [260] Human Rights Watch interview with Eli B., 15, Greene County, North Carolina, May 18, 2013.
- [261] Human Rights Watch interview with Jaime V., 18, Hamblen County, Tennessee, October 24, 2013.
- [262] Human Rights Watch interview with Estevan O., 15, Lenoir County, North Carolina, May 19, 2013.
- [263] Human Rights Watch interview with Margarita S., 16, Wayne County, North Carolina, July 21, 2013.
- [264] Human Rights Watch interview with Sally G., 16, and Marissa G., 14, Wayne County, North Carolina, July 21, 2013.
- [265] Migrant & Seasonal Agricultural Worker Protection Act, 29 C.F.R. sec. 500.80.
- [266] Human Rights Watch interview with Calvin R., 17, Scott County, Kentucky, September 4, 2013.
- [267] Human Rights Watch interview with Calvin R., 17, Crittenden County, Kentucky, September 25, 2013.
- [268] Human Rights Watch interview with Jason H., 17, Greene County, North Carolina, July 28, 2013.
- [269] Human Rights Watch interview with Guillermo S., 18, and Victor R., 15, Wilson County, North Carolina, July 28, 2013.
- [270] Ibid.
- [271] Human Rights Watch interview with Yanamaria W., 14, Warren County, Kentucky, September 2, 2013.
- [272] Human Rights Watch interview with Adriana F., 14, Montgomery County, Kentucky, September 3, 2013.
- [273] Human Rights Watch interview with Henry F., 17, Montgomery County, Kentucky, September 6, 2013.
- [274] Human Rights Watch interview with Luciano P., 18, Fayette County, Kentucky, September 4, 2013.
- [275] Ibid.
- [276] The US Supreme Court in *Plyler v. Doe*, 457 U.S. 202, 221-222 (1982) found that there is no right to education under the US Constitution, but that denying public education to children living in the US without authorization violates the Equal Protection Clause of the 14th Amendment (The inestimable toll of [educational] deprivation on the social, economic, intellectual, and psychological wellbeing of the individual, and the obstacle it poses to individual achievement, make it most difficult to reconcile the cost or the principle of a status-based denial of basic education with the framework of equality embodied in the Equal Protection Clause.). For the right to education under international law, see, for example, the Universal Declaration of Human Rights, G.A. res. 217A (III), U.N. Doc A/810 at 71 (1948) art. 26(1) (Everyone has the right to education. Elementary education shall be compulsory.).
- [277] International Labor Organization Convention Concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labor (Worst Forms of Child Labor Convention), adopted June 17, 1999, 38 ILM 1207 (entered into force November 19, 2000), ratified by the United States on December 2, 1999, art. 3.
- [278] Worst Forms of Child Labor Convention, arts. 1, 4, 6, and 7.
- [279] Ibid., art. 7.
- [280] ILO-IPEC, Child Labour by Sector: Agriculture, undated, http://www.ilo.org/ipec/areas/Agriculture/lang--en/index.htm (accessed January 17, 2014).
- [281] ILO Committee of Experts on the Application of Conventions and Recommendations (CEAR), Observation: Worst Forms of Child Labour Convention, 1999 (No. 182) United States (Ratification: 1999), adopted 2012, published 102nd ILC session (2013), http://www.ilo.org/dyn/normlex/en/f?p=1000:13100:0::NO:13100:P13100 COMMENT ID:3057769:NO (accessed January 17, 2014).
- [282] ILO Committee of Experts on the Application of Conventions and Recommendations, General Report and Observations concerning Particular Countries, (articles 19, 22 and 35 of the Constitution), Report III (Part 1A), 2014, pp. 265-266, http://www.ilo.org/wcmsp5/groups/public/---ed norm/---relconf/documents/meetingdocument/wcms 235054.pdf (accessed February 10,

[283] ILO Committee of Experts on the Application of Conventions and Recommendations (CEAR), Observation: Worst Forms of Child Labour Convention, 1999 (No. 182) - United States (Ratification: 1999), adopted 2012, published 102nd ILC session (2013), http://www.ilo.org/dyn/normlex/en/f?p=1000:13100:0::NO:13100:P13100 COMMENT ID:3057769:NO (accessed January 17, 2014).

[284] Ibid.

[285] International Labor Organization Recommendation No. 190 Concerning the Prohibition and Immediate Elimination of the Worst Forms of Child Labor, adopted June 17, 1999.

[286] Ibid, para. 3.

[287] Ibid, para. 4.

[288] Human Rights Watch telephone interview with Benjamin Smith, Senior Officer for Corporate Social Responsibility, ILO-IPEC (International Programme on the Elimination of Child Labour), February 12, 2013.

[289] Email from Benjamin Smith, Senior Officer for Corporate Social Responsibility, ILO-IPEC to Human Rights Watch, March 27, 2014.

[290] US Department of Labor, Wage and Hour Division, 29 CFR Parts 570 and 579: Notice of Proposed Rulemaking and Request for Comments: Child Labor Regulations, Orders and Statements of Interpretation; Child Labor ViolationsCivil Money Penalties: Employment in Tobacco Production and Curing in Federal Register, vol. 76, no. 171 (September 2, 2011) pp. 54864-54865, http://www.gpo.gov/fdsys/pkg/FR-2011-09-02/pdf/2011-21924.pdf (accessed March 26, 2014).

[291] US Department of Labor, Wage and Hour Division, Child Labor Regulations, Orders and Statements of Interpretation; Child Labor ViolationsCivil Money Penalties. Withdrawal of Proposed Rule, Federal Register vol. 77, no. 103, May 29, 2012, https://webapps.dol.gov/federalregister/PdfDisplay.aspx?DocId=26108 (accessed January 22, 2014). For a description of the opposition to the proposed regulations, see e.g. Gabriel Thompson, Why Are Children Working in American Tobacco Fields?, *The Nation*, November 12, 2013, http://www.thenation.com/article/177136/why-are-children-working-american-tobacco-fields (accessed April 29, 2014).

[292] ILO Committee of Experts on the Application of Conventions and Recommendations (CEAR), Observation: Worst Forms of Child Labour Convention, 1999 (No. 182) - United States (Ratification: 1999), adopted 2012, published 102nd ILC session (2013), http://www.ilo.org/dyn/normlex/en/f?p=1000:13100:0::NO:13100:P13100_COMMENT_ID:3057769:NO (accessed January 17, 2014); ILO Committee of Experts on the Application of Conventions and Recommendations, General Report and Observations concerning Particular Countries, (articles 19, 22 and 35 of the Constitution), Report III (Part 1A), 2014, pp. 265-266, http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_235054.pdf (accessed February 10, 2014).

[293] Minimum Age for Admission and Employment (Minimum Age Convention), adopted June 26, 1973, 1015 U.N.T.S. 297, entered into force June 19, 1976. The United States has not ratified the ILO Minimum Age Convention.

[294] Tripartite meetings bring together a cross-section of government, employer and worker representatives from countries that are prominent or have a strong interest in a given sector. ILO Tripartite Meeting on the Future of Employment in the Tobacco Sector, Resolution Concerning Child Labour in the Tobacco Sector, February 24-28, 2003, http://www2.ilo.org/public/english/dialogue/sector/techmeet/tmets03/tmets-res-10.pdf (accessed February 11, 2010).

[295] Food and Agriculture Organization of the United Nations, Statistics Division (FAOSTAT), Production, Countries by Commodity, Tobacco, Unmanufactured, 2012, August 2013, http://faostat.fao.org/site/339/default.aspx (accessed March 18, 2014).

[296] Government of Brazil, Inspectorate Labour Order No. 20/2001, amended by Order No. 4/2002. On file with Human Rights Watch. Available at ILO-IPEC, Legislation and Policy Response database (LEPORD), http://cl-legal-info.itcilo.org (accessed May 6, 2014). See also, Government of Brazil, Decree No. 6.841 of June12, 2008 regulating Articles 3(d) and 4 of Convention No. 182 of the International Labour Organization (ILO) concerning the prohibition and immediate action for the elimination of the worst forms of child labour, as provided by Legislative Decree No. 178, of 14 December 1999, and promulgated by Decree No. 3.597 of 12 September 2000, and other provisions, cited in Child Labor on Tobacco Becomes a Training Subject in Prudentopolis, *Sinditabaco*, September 6, 2012, http://sinditabaco.com.br/en/child-labor-on-tobacco-becomes-a-training-subject-in-prudentopolis/ (accessed May 6, 2014).

[297] Government of India, Child Labour (Prohibition and Regulation) Act, 1986, The Schedule, Part B: Processes, para 48, http://clc.gov.in/Acts/shtm/chla.php (accessed March 18, 2014).

[298] Employment Act (CAP . 55:22) Employment (Prohibition of Hazardous Work for Children) Order, 2012 The Malawi Gazette Supplement, February 17, 2012, (Regulations, Rules etc., (No. 1A), http://www.ilo.org/dyn/natlex/natlex_browse.details? p_lang=en&p_country=MWI&p_classification=04&p_origin=SUBJECT (accessed March 18, 2014). The Order states hazardous work shall not be prohibited for children between the ages of 16 and 18 where the health and safety of that person is fully protected, and the person has received adequate training in performing the activities.

[299] Under Russian law, children under 18 are prohibited from being employed in harvesting, transportation and initial processing tobacco. Degree of the Russian Federation, February 25, 2000, No. 163 (as amended June 20, 2011), Confirming the List of Heavy Work and Work with Hazardous or Dangerous Conditions, in which it is Prohibited to Employ Persons Under 18 Years Old. [25.02.2000 N 163 (. 20.06.2011) [", "], item 1971.

[300] Order of the Ministry of Labor and Social Protection of the Republic of Kazakhstan, No. 185-P, July 31, 2007, On Confirming the List of Professions in Which It Is Prohibited to Hire Workers Under the Age of Eighteen Years Old, and Establishing the Norms For Hauling and Moving of Heavy Loads for Workers Under the Age of Eighteen.

[301] According to information received at the ILO, The worst forms of child labour in Uganda include: Children engaged in commercial agriculture, namely in sugar and tea plantations, tobacco and rice farms. ILO-IPEC, Legislation and Policy Response database (LEPORD), http://cl-legal-info.itcilo.org (accessed March 21, 2014). The Government of Ugandas Guidelines for Labour Inspectors On the Identification of Hazardous Child Labour states that children ages 15-17 are prohibited from the harvesting and marketing of tobacco. On file with Human Rights Watch.

[302] Eliminating Child Labour in Tobacco Growing Foundation, About Us, ECLT Foundation website, 2013, http://www.eclt.org/site/about-us/ (accessed March 18, 2014).

[303] Email from Sonia Velazquez, executive director, Eliminating Child Labour in Tobacco Growing Foundation to Human Rights Watch, March 20, 2014.

[304] Email from Sonia Velazquez, executive director, Eliminating Child Labour in Tobacco Growing Foundation to Human Rights Watch, March 20, 2014.

[305] British American Tobacco, Altria Group, Alliance One, Imperial Tobacco Group, Japan Tobacco/Japan Tobacco International, Philip Morris International, and Universal. ECLT Foundation, Board Members, http://www.eclt.org/site/about-us/how-we-are-governed/board-members/ (accessed March 21, 2014).

[306] Convention on the Rights of the Child (CRC), adopted November 20, 1989, G.A. Res. 44/25, annex, 44 U.N. GAOR Supp. (No 49) at 167, U.N. Doc. A/44/49 (1989), entered into force September 2, 1990, The US signed the CRC on February 16, 1995.

[307] Vienna Convention on the Law of Treaties, concluded May 23, 1969, 1155 U.N.T.S. 331, entered into force January 27, 1980, art. 18.

[308] CRC, art. 32.

[309] International Convention on the Elimination of All Forms of Racial Discrimination (ICERD), 660 U.N.T.S. 195, entered into force January 4, 1969 (prohibiting unlawful discrimination based on race, colour, descent, or national or ethnic origin), art. 1(1). The ICERD was ratified by the US on October 21, 1994.

[310] Committee on the Elimination of Racial Discrimination, General Comment No. 14, para. 2. In its concluding observations on the implementation of the ICERD in the US in 2001, the Committee stated: While noting the numerous laws, institutions and measures designed to eradicate racial discrimination affecting the equal enjoyment of economic, social and cultural rights, the Committee is concerned about persistent [racial and ethnic] disparities in the enjoyment of, in particular, the right to adequate housing, equal opportunities for education and employment, and access to public and private health care. A/56/18/380-407, August 14, 2001, 398.

[311] According to 2008-2009 survey data from the National Agricultural Workers Survey (NAWS), 76 percent of all US crop workers are Hispanic. Email from Egan Reich, US Department of Labor, to Human Rights Watch, May 6, 2014. Citing 2008-2009 data from The National Agricultural Workers Survey: Public Access Data, http://www.doleta.gov/agworker/naws.cfm (accessed May 6, 2014).

[312] Human Rights Watch, Fields of Peril: Child Labor in US Agriculture, May 2010, http://www.hrw.org/reports/2010/05/05/fields-peril (accessed February 3, 2014).

[313] Committee on the Elimination of Racial Discrimination, Consideration of Reports Submitted by State Parties under Article 9 of the Convention: Concluding Observations, United States of America, CERD/C/USA/CO/6, February 2008, para 28.

[314] Committee on the Elimination of Racial Discrimination, Concluding Observation of the Committee on the Elimination of Racial Discrimination: United States of America, CERD/C/Misc. /56/18, August 2001, paras. 380-407, para. 393.

[315] Universal Declaration of Human Rights, adopted December 10, 1948, G.A. Res. 217A(III), U.N. Doc. A/810 at 71 (1948), art. 25; International Covenant on Economic, Social and Cultural Rights (ICESCR), adopted December 16, 1966, G.A. Res. 2200A (XXI), 21 U.N. GAOR Supp. (No. 16) at 49, U.N. Doc. A/6316 (1966), 993 U.N.T.S. 3, entered into force January 3, 1976, signed by the United States on October 5, 1977, art. 12; Convention on the Rights of the Child (CRC), adopted November 20, 1989, G.A. Res. 44/25, annex, 44 U.N. GAOR Supp. (No 49) at 167, U.N. Doc. A/44/49 (1989), entered into force September 2, 1990, signed by the United States on February 16, 1995., art. 24.

[316] ICESCR, art. 12.

[317] Ibid, art. 7.

[318] CESCR, General Comment No. 14, Article 12, The Right to the Highest Attainable Standard of Health, UN Doc. E/C.12/2000/4 (2000), para. 15.

[319] The preambles to key human rights treaties recognize that ensuring respect for human rights is a shared responsibility that extends to every organ of society, not only to states. In addition, the preambles of both the International Covenant on Civil and Political Rights and the International Covenant on Economic Social and Cultural Rights recognize that individuals have human rights responsibilities, a term that can incorporate juridical persons (including businesses) as well as natural persons.

[320] Committee on the Rights of the Child, General comment No. 16 (2013) on State obligations regarding the impact of the business sector on childrens rights, Adopted by the Committee at its sixty-second session (14 January 1 February 2013), para. 4.

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[321] CRC, General Comment No. 16, para. 9.
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[322] Ibid, para. 11.

[323] UNICEF, UN Global Compact and Save the Children, Childrens Rights and Business Principles, 2012, http://www.unicef.org/csr/css/PRINCIPLES 23 02 12 FINAL FOR PRINTER.pdf (accessed March 13, 2014).

[324] SeeUNHuman Rights Council, Mandate of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, Resolution 8/7,A/HRC/RES/8/7; andHuman rights and transnational corporations and other business enterprises, Resolution 17/4,A/HRC/17/L.17/Rev.1.

[325] OECD Guidelines for Multinational Enterprises (2011 Edition): Recommendations for Responsible Business Conduct in a Global Context, May 25, 2011, http://www.oecd.org/document/28/0,3746,en_2649_34889_2397532_1_1_1_1,00.html (accessed July 6, 2012). As described in the document itself, [t]he Guidelines are recommendations jointly addressed by governments to multinational enterprises [that] provide principles and standards of good practice consistent with applicable laws and internationally recognized standards.

[326] 29 U.S.C. 201, et seq. A separate federal labor law specific to farmworkers, the Migrant and Seasonal Agricultural Worker Protection Act of 1983, sets additional employment standards for agricultural workers related to recordkeeping, payroll, disclosure of terms of employment. The law also requires farm labor contractors to register with the Department of Labor. The Migrant & Seasonal Agricultural Worker Protection Act, 29 U.S.C. sec. 1801, et seq. 29 C.F.R. sec. 500.

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[327] 29 U.S.C. sec. 213(b)(12).
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[328] 29 U.S.C. sec. 213(a)(6)(A).

[329] The National Labor Relations Act (NLRA), 29 U.S.C. sec. 152(3).

[330] The FLSA allows for very limited exceptions to this, including work delivering newspapers, acting, and making evergreen wreaths.

[331] Children ages 14 and 15 can work in certain limited jobs, such as cashiers, stocking shelves, or washing cars, in retail or food service stores, and in gas stations but only for limited hours: up to 40 hours in a nonschool week; up to 18 hours in a school week; up to 8 hours on a nonschool day; and up to 3 hours on a school day.

[332] 29 U.S.C. sec. 213(c)(1)(A). A "small farm" is one which did not employ more than 500 man-days of agricultural labor (or about 7 workers) during any calendar quarter of the preceding year.

[333] 29 U.S.C. sec. 213(c)(1)(B).

[334] 29 U.S.C. sec. 213(c)(1)(C).

[335] 29 U.S.C. sec. 213(c)(2).

[336] Compare 29 C.F.R. 570.71(a)(3)(iv) (power saws in agriculture) with 570.65(a)(i) (power saws in all other industries).

[337] See Section IV of this report for federal data on fatal and non-fatal occupational injuries in agriculture in 2012.

[338] Ky. Rev. Stat. sec 339.210 (West) (As used in KRS 339.220 to 339.450 gainful employment does not include employment in farm work or in domestic service in a private home). Tenn. Code Ann. sec. 50-5-107(3).

[339] Va. Code Ann. secs. 40.1-78 through 40.1-116

[340] The North Carolina Wage and Hour Act, N.C. General. Statute. sec. 95-25.14 (a)(2) states, The provisions of G.S. 95-25.3 (Minimum Wage), G.S. 95-25.4 (Overtime), and G.S. 95-25.5 (Youth Employment), and the provisions of G.S. 95-25.15(b) (Record Keeping) as they relate to these exemptions, do not apply to . . . [a]ny person employed in agriculture, as defined under the Fair Labor Standards Act. Ky. Rev. Stat. sec. 337.010 (As used in KRS 337.275 to 337.325, 337.345, and KRS 337.385 to 337.405, unless the context requires otherwise: (a) Employee is any person employed by or suffered or permitted to work for an employer, but shall not include: 1. Any individual employed in agriculture . . .). Va. Code Ann. sec. 40.128.9(B)(1) ("Employee" includes any individual employed by an employer, except the following Any person employed as a farm laborer or farm employee.)

[341] 29 C.F.R. sec. 570.2.

[342] 29 C.F.R. sec. 570.71. Children under age 16 may still handle pesticides of lower toxicity, and children ages 16 and older may work in agriculture without any age-related restrictions. Notably, a 2003 study of children under age 18 with acute occupational pesticide-related illnesses found that only a few appeared to working in violation of these regulations. **Calvert et al., Acute Pesticide-Related Illnesses Among Working Youths, 19881999,** *American Journal of Public Health*, p. 609.

[343] US Department of Labor, Wage and Hour Division, Updating Child Labor Regulations for the 21st Century, http://www.naeda.com/Portals/0/docs/Government%20Relations/Child%20Labor-Complete.pdf (accessed February 7, 2014).

[344] The proposed regulations would have added prohibitions on operating additional heavy machinery, working in silos and grain storage facilities, and handling all pesticides.

[345] US Department of Labor, Wage and Hour Division, 29 CFR Parts 570 and 579: Notice of Proposed Rulemaking and Request for Comments: Child Labor Regulations, Orders and Statements of Interpretation; Child Labor ViolationsCivil Money Penalties: Employment in Tobacco Production and Curing in Federal Register, vol. 76, no. 171 (September 2, 2011) pp. 54864-54865,

http://www.gpo.gov/fdsys/pkg/FR-2011-09-02/pdf/2011-21924.pdf (accessed March 26, 2014).

[346] US Department of Labor, Wage and Hour Division, Child Labor Regulations, Orders and Statements of Interpretation; Child Labor ViolationsCivil Money Penalties. Withdrawal of Proposed Rule, Federal Register vol. 77, no. 103, May 29, 2012, https://webapps.dol.gov/federalregister/PdfDisplay.aspx?DocId=26108 (accessed January 22, 2014).

[347] 40 C.F.R. sec. 170.1.See 40 C.F.R. sec. 170 and following sections for the entire Worker Protection Standard.

[348] 29 C.F.R. sec. 570.2.

[349] See Restricted-entry statements, 40 C.F.R. sec. 156.208.

[350] Calvert et al., Acute Pesticide-Related Illnesses Among Working Youths, 19881999, American Journal of Public Health, p. 609.

[351] Human Rights Watch interview with Virginia Ruiz, Director of Occupational and Environmental Health, Farmworker Justice, January 27, 2014.

[352] 29 C.F.R. sec. 1910.

[353] Among regulations that are exempt for agricultural workers include rules regarding work at heights (such as work on ladders), the use of personal protective requirement (including reinforced shoes and gloves), and the availability of medical services and first aid. The seven general industry standards that do apply to agriculture govern temporary labor camps, storage and handling of anhydrous ammonia, logging operations, slow-moving vehicles, hazard communication, cadmium, and the retention of US Department of Transportation markings, placards, and labels. 29 C.F.R. sec. 1928.21(a).

[354] 29 C.F.R. sec. 1928.

[355] 29 C.F.R. sec. 1928.110.

[356] Congress exempts small farms from enforcement of OSHA standards by attaching riders to annual appropriation bills.

[357] Human Rights Watch interview with Patricia Davidson and Michael Hancock, Wage and Hour Division, Department of Labor, Washington, DC, February 28, 2014.

[358] General duty clause refers to section 5(a)(1) of the Occupational Safety and Health Act, which requires employers to furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees.

[359] 29 U.S.C. sec. 667(c)(2).

[360] United States Department of Labor, Occupational Safety and Health Administration, Frequently Asked Questions about State Occupational Safety and Health Plans, undated, https://www.osha.gov/dcsp/osp/faq.html#oshaprogram (accessed January 23, 2014).

[361] Human Rights Watch, Fields of Peril: Child Labor in US Agriculture, May 2010, http://www.hrw.org/reports/2010/05/05/fieldsperil (accessed February 3, 2014).

[362] Human Rights Watch interview with Derrick Witherspoon, branch chief, FLSA and Child Labor, Division of Enforcement Policy and Procedures; James Kessler, branch chief, Immigration and Farm Labor, Division of Enforcement Policy and Procedures; Michael Hancock, assistant administrator for policy; Mike Lazzeri director, Division of Enforcement Policy and Procedures, et al., Wage and Hour Division, US Department of Labor, Washington, DC, October 23, 2013.

[363] Email from Michael Kravitz, director of Communications, Wage and Hour Division, US Department of Labor, to Human Rights Watch, December 19, 2013. Regarding all child labor cases, the Wage and Hour Division found 704 cases of child labor violations in 2013.

[364] The hot goods provision came into use by the Wage and Hour Division in 1998, although it has been part of the FLSA since its origination in 1938. The provision as it pertains to child labor reads in part: No producer, manufacturer, or dealer shall ship or deliver for shipment in commerce any goods produced in an establishment situated in the United States in or about which within thirty days prior to the removal of such goods there from any oppressive child labor has been employed. 29 U.S.C. sec. 212(a).

[365] Email from Michael Kravitz, director of Communications, Wage and Hour Division, US Department of Labor, to Human Rights Watch, December 19, 2013.

[366] Human Rights Watch interview with Patricia Davidson and Michael Hancock, Wage and Hour Division, Department of Labor, Washington, DC, February 28, 2014.

[367] US Environmental Protection Agency (EPA), FY2012 WPS Inspection and Enforcement Accomplishment Report, March 21, 2013, http://www.epa.gov/compliance/monitoring/programs/fifra/wps.html (accessed February 3, 2014).

[368] EPA, FY2012 Overview of WPS Violations During an Inspection, March 27, 2013, http://www.epa.gov/compliance/monitoring/programs/fifra/wps.html (accessed February 3, 2014).

[369] Food and Agriculture Organization of the United Nations, Statistics Division (FAOSTAT), Production, Countries by Commodity, Tobacco, Unmanufactured, 2012, August 2013, http://faostat.fao.org/site/339/default.aspx (accessed March 18, 2014).

[370] Japan Tobacco Group (JT), Annual Report 2013, March 2013, http://www.jt.com/investors/results/annual report/pdf/annual2013 E all.pdf (accessed February 11, 2014).

[371] JT, Annual Report 2013.

[372] Letter from John S. Wilson, III, Vice President, Corporate Sustainability and Commercial Equity, RAI Services Company, to Human Rights Watch, February 28, 2014.

[373] Letter from Ronald S. Milstein, Executive Vice President, General Counsel, and Secretary, Lorillardto Human Rights Watch, January 21, 2014.

[374] Letter from H. Michal Ligon, Vice President, Universal Leaf Tobacco Company, to Human Rights Watch, March 10, 2014.

[375] UN Commission on Human Rights, Report of the Special Representative of the Secretary-General, Annex, I.A.1, March 2011, http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf (accessed March 10, 2014).

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Government, Companies Should Provide Protection

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