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Hazardous Child Labor in Tobacco Farming in Indonesia

Thousands of children in Indonesia, some just 8 years old, are working in hazardous conditions on tobacco farms. Indonesian and multinational tobacco companies buy tobacco grown in Indonesia, but none do enough to ensure that children are not doing hazardous work on farms in their supply chains.

An 11-year-old girl ties tobacco leaves onto sticks to prepare them for curing in East Lombok, West Nusa Tenggara. 2015 Marcus Bleasdale for Human Rights Watch

Thousands of children in Indonesia, some just 8 years old, are working in hazardous conditions on tobacco farms. Indonesian and multinational tobacco companies buy tobacco grown in Indonesia, but none do enough to ensure that children are not doing hazardous work on farms in their supply chains.

Ayu is a petite, soft-spoken 13-year-old girl from a village near Garut, in the mountains of West Java, Indonesia. [1] She is one of five children in her family, and her parents are farmers who cultivate tobacco and other crops on a small plot of land. Since I was a kid, I've been going to the fields, she said. My parents plant tobacco. Mostly I help my parents and sometimes my neighbors. I have an older sister, an older brother, and two younger siblings. They help too.

Ayu is in her first year of junior high school, and she mostly helps on the farm outside of school early in the morning before classes, in the afternoons, and on weekends and holidays. But she told Human Rights Watch she occasionally missed school to work in tobacco farming. My mom asked me to skip school last year when it was the harvest, she said.

She told Human Rights Watch she vomits every year while harvesting tobacco:

The symptoms she described vomiting and nausea are consistent with acute nicotine poisoning, an occupational illness specific to tobacco farming that occurs when workers absorb nicotine through their skin while having contact with tobacco plants.

Ayu also helps her father mix the toxic pesticides he applies to the tobacco. I just put three or four cups of the chemical in the bucket, put in the water, and mix it with [a piece of] wood, and my dad puts it in the tank, she explained. The smell is so strong. It makes my stomach sick. Like most of the farmers in her village, Ayu's parents sell the tobacco they grow to the leader of their village, who pools together tobacco from dozens of farmers, transports it to a warehouse in Central Java, and sells it to a tobacco trader there. The trader buys tobacco from many different suppliers, repackages it, and sells it on the open market to Indonesian and multinational tobacco manufacturing and leaf supply companies.

This report based on extensive research including interviews with more than 130 children who work on tobacco farms in Indonesia shows that child workers are being exposed to serious health and safety risks. The dangers include acute nicotine poisoning from contact with tobacco plants and leaves, and exposure to toxic pesticides and other chemicals. Few of the children we interviewed, or their parents, were trained on safety measures or knew the health risks of the work. While Indonesian child labor laws are generally in line with international standards, our research shows that inadequate regulations and poor enforcement of the law, particularly in the small-scale farming sector, leave children at risk. The report concludes with detailed recommendations to the Indonesian government, tobacco companies, and other relevant players in the tobacco industry, including that authorities should immediately prohibit children from performing any tasks that involve direct contact with tobacco, and that companies should improve their human rights due diligence procedures to identify and end hazardous child labor on tobacco

farms.

A boy's hands after harvesting tobacco leaves on a farm near Sampang, East Java. 2015 Marcus Bleasdale for Human Rights Watch

A 15-year-old girl harvests tobacco leaves by hand on a farm near Sampang, East Java. 2015 Marcus Bleasdale for Human Rights Watch

A 11-year-old girl (front) and an 9-year-old girl (back) harvest tobacco on a farm near Sumenep, East Java. 2015 Marcus Bleasdale for Human Rights Watch

An adult tobacco worker applies a pesticide to a tobacco farm near East Lombok, West Nusa Tenggara. 2015 Marcus Bleasdale for Human Rights Watch

2016-asia-indonesia-tobacco-photo-Child tobacco workers prepare to carry sticks of harvested tobacco leaves to a curing barn near East Lombok, West Nusa Tenggara. 2015 Marcus Bleasdale for Human Rights Watch

Students at a school near Sumenep, East Java. Many of the children's parents cultivate tobacco, and some of the children work in tobacco farming before and after school. 2015 Marcus Bleasdale for Human Rights Watch

A young girl ties tobacco leaves onto sticks to prepare them for curing in East Lombok, West Nusa Tenggara. 2015 Marcus Bleasdale for Human Rights Watch

A man passes advertisements for popular brands of cigarettes as he transports tobacco with a horse-drawn cart in East Lombok, West Nusa Tenggara. 2015 Marcus Bleasdale for Human Rights Watch

A 13-year-old tobacco worker sits near a pile of dried tobacco leaves in East Lombok, West Nusa Tenggara. 2015 Marcus Bleasdale for Human Rights Watch

A trader judges the quality of tobacco he purchases from another trader at a warehouse near Sumenep, East Java. He said he purchases tobacco from hundreds of farmers and traders and sells it to a cigarette manufacturer owned by a multinational tobacco company. 2015 Marcus Bleasdale for Human Rights Watch

An 8-year-old girl sorts and bundles tobacco leaves by hand near Sampang, East Java. 2015 Marcus Bleasdale for Human Rights Watch

Children tie tobacco leaves onto sticks to prepare them for curing in East Lombok, West Nusa Tenggara, Indonesia. 2015 Marcus Bleasdale for Human Rights Watch

An 11-year-old girl ties tobacco leaves onto sticks to prepare them for curing in East Lombok, West Nusa Tenggara. 2015 Marcus Bleasdale for Human Rights Watch

An adult worker carries a bundle of harvested tobacco leaves on her head. 2015 Marcus Bleasdale for Human Rights Watch

Children and adults sort and bundle tobacco leaves by hand near Sampang, East Java. 2015 Marcus Bleasdale for Human Rights Watch

Two boys harvest tobacco on a farm near Sampang, East Java. 2015 Marcus Bleasdale for Human Rights Watch

A young adult tobacco worker loads sticks of harvested tobacco leaves into a curing barn near East Lombok, West Nusa Tenggara. 2015 Marcus Bleasdale for Human Rights Watch

Children bundle leaves to prepare them for curing in Sampang, East Java. 2015 Marcus Bleasdale for Human Rights Watch

A 12-year-old girl applies fertilizer by hand to tobacco plants on a farm near Sampang, East Java. Video still 2015 Human Rights Watch

Indonesia is the world's fifth-largest tobacco producer, home to more than 500,000 tobacco farms nationwide. Though domestic and international laws prohibit children under 18 from performing hazardous work, thousands of children like Ayu work in hazardous conditions on tobacco farms in Indonesia, exposed to nicotine, toxic pesticides, extreme heat, and other dangers. This work could have lasting consequences on their health and development.

The government of Indonesia has a strong legal and policy framework on child labor. Under national labor law, 15 is the standard minimum age for employment, and children ages 13 to 15 may perform only light work that is not dangerous and does not interfere with their schooling. Children under 18 are prohibited from performing hazardous work, including any work in environments with harmful chemical substances. Indonesia's list of hazardous occupations prohibited for children does not specifically ban work handling tobacco. Human Rights Watch believes that available evidence demonstrates that any work involving direct contact with tobacco in any form constitutes work with harmful chemical substances, and should be prohibited for all children.

Nicotine is present in all parts of tobacco plants and leaves at all stages of production. Public health research has shown that tobacco workers absorb nicotine through their skin while handling tobacco, particularly when the plant is wet. Studies have found that non-smoking adult tobacco workers have similar levels of nicotine in their bodies as smokers in the general population. Nicotine is a toxin, and nicotine exposure has been associated with lasting adverse consequences on brain development. The use of protective equipment is insufficient to eliminate the dangers of working with tobacco and may lead to other dangers, such as heat illness.

Despite the domestic and international prohibitions on hazardous child labor, Human Rights Watch documented children engaging in hazardous work in tobacco

farming in four Indonesian provinces, including the three provinces responsible for almost 90 percent of tobacco production each year: East Java, Central Java, and West Nusa Tenggara. Children we interviewed worked directly with tobacco plants, handled pesticides, and performed dangerous physical labor in extreme heat, putting them at risk of short and long-term health consequences.

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Some of the hazards faced by child tobacco workers in Indonesia are not unique to tobacco farming. Children working in other crops may also be exposed to pesticides, work in high heat, and face other dangers. However, handling tobacco is inherently hazardous work for children, due to the nicotine in the plant, and tobacco farming inevitably requires workers to have significant contact with the plant during cultivation, harvesting, and curing.

Many Indonesian companies and the largest multinational tobacco companies in the world purchase tobacco grown in Indonesia and use it to manufacture tobacco products sold domestically and abroad. Several of the largest multinational tobacco companies in the world have acknowledged the risks to children of participating in certain tasks on tobacco farms. These companies ban children under 18 from performing some of the most hazardous tasks on farms in their supply chains, such as harvesting tobacco or applying pesticides to the crop. But none of these companies have policies and procedures sufficient to ensure that tobacco entering their supply chains was not produced with hazardous child labor. As a result, these companies risk contributing to the use of, and benefitting from, hazardous child labor.

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On three research trips between September 2014 and September 2015, Human Rights Watch interviewed a total of 227 people, including 132 children ages 8 to 17 who reported working on tobacco farms in 2014 or 2015, and 88 other individuals, such as parents of child workers, tobacco farmers, tobacco leaf buyers and sellers, warehouse owners, village leaders, health workers, representatives of nongovernmental organizations, and others. In addition, we met or corresponded with officials from several government bodies, including the Ministry of Manpower and Transmigration, the Ministry of Health, the Ministry of Agriculture, the Ministry of Education and Culture, and the Indonesian Child Protection Commission.

Human Rights Watch sent letters to four Indonesian companies and nine multinational tobacco manufacturing and leaf supply companies, to share our research findings and request information on each company's policies and practices regarding child labor in Indonesia. As detailed below, seven multinational companies responded in detail. We sent several letters and made numerous phone calls to each of the four Indonesian companies in an effort to secure a meaningful response, but none provided any substantive response. Human Rights Watch analyzed the human rights due diligence procedures of those companies that responded in detail to our letters as thoroughly as possible, based on information provided by the companies, publicly available information on their websites, and interviews with child workers, tobacco farmers, and traders in Indonesia.

Most of the children interviewed by Human Rights Watch started working in tobacco farming before age 15, the standard minimum age for employment in Indonesia. Approximately three quarters of the children we interviewed began working in tobacco farming by age 12. Most children worked on tobacco farms throughout the season, from planting through the harvest and curing process.

Children interviewed for this report typically worked on small plots of land farmed by their parents or other family members. In addition to working on land farmed by their families, many children also worked on land farmed by their neighbors and other members of their communities. Some children did not receive any wages for their work, either because they worked for their own families or exchanged labor with other families in their communities. Other children received modest wages.

Children in all four provinces said that they worked in tobacco farming to help their families. The World Bank reports that 14.2 percent of Indonesia's rural population lives below the national poverty line, almost double the urban poverty rate. According to the International Labour Organization (ILO), poverty is the main cause of child labor in agriculture worldwide. Human Rights Watch research found that family poverty contributed to children's participation in tobacco farming in Indonesia. I want to help my parents make a living, said 11-year-old Ratih, who worked on her parents' tobacco farm in Jember, East Java. Sinta, a 13-year-old girl who worked on tobacco farms in her village in Magelang, Central Java, said, I work so I can help my parents, to make life easier. To make it not such a difficult life.

My kids are helping me in the field so I can save money on labor, said Ijo, a farmer in his mid-40s and father of four interviewed in Garut, West Java, in 2015. He said he was conflicted about his 12-year-old son helping him on the farm: Of course I don't want my kids working in tobacco because there's a lot of chemicals on it, and it could harm my kids. But they wanted to work, and we are farmers. I need more money to pay the laborers. But my son can help all season. You can imagine that I can save a lot of money when he joins me in the field. It's complicated.

While not all work is harmful to children, the ILO defines hazardous work as 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. The ILO considers agriculture one of the three most dangerous sectors in terms of work-related fatalities, non-fatal accidents, and occupational diseases.

Human Rights Watch found that many aspects of tobacco farming in Indonesia pose significant risks to children's health and safety. Children working on tobacco farms in Indonesia are exposed to nicotine, toxic pesticides, and extreme heat. The majority of children interviewed for this report described sickness while working in tobacco farming, including specific symptoms associated with acute nicotine poisoning, pesticide exposure, and heat-related illness, as described below. Some children reported respiratory symptoms, skin conditions, and eye irritation while working in tobacco farming.

All children interviewed for this report described handling and coming into contact with tobacco plants and leaves containing nicotine. In the short term, absorption of nicotine through the skin can lead to acute nicotine poisoning, called Green Tobacco Sickness. The most common symptoms of acute nicotine poisoning are nausea, vomiting, headaches, and dizziness. Approximately half of the children we interviewed in Indonesia in 2014 or 2015 reported experiencing at least one symptom consistent with acute nicotine poisoning while working in tobacco farming. Many reported multiple symptoms. For example, Nadia, a 16-year-old girl in Bondowoso, East Java, said she vomits every year in the harvest season while bundling and sorting harvested tobacco leaves with other women and girls in her village. Sometimes I get a headache. Sometimes I'm even throwing up [It happens] when we string the leaves because we were sitting in the middle of a bundle of tobacco. It happens when the tobacco is still wet and just coming from the fields. Every time it's the beginning of the season, we're throwing up.

Rio, a tall 13-year-old boy, worked on tobacco farms in his village in Magelang, Central Java, in 2014. He told Human Rights Watch, After too long working in tobacco, I get a stomachache and feel like vomiting. It's from when I'm near the tobacco for too long. He likened the feeling to motion sickness, saying It's just like when you're on a trip, and you're in a car swerving back and forth.

The long-term effects of nicotine absorption through the skin have not been studied, but public health research on smoking suggests that nicotine exposure during childhood and adolescence may have lasting consequences on brain development. The prefrontal cortex, the part of the brain responsible for executive function and attention, is one of the last parts of the brain to mature and continues developing throughout adolescence and into early adulthood. The prefrontal cortex is particularly susceptible to the impacts of stimulants, such as nicotine. Nicotine exposure in adolescence has been associated with mood disorders, and problems with memory, attention, impulse control, and cognition later in life.

Many child tobacco workers interviewed for this report also said they handled or applied pesticides, fertilizers, or other chemical agents to tobacco farms in their

communities. Some children also reported seeing other workers apply chemicals in fields in which they were working, or in nearby fields. A number of children reported immediate sickness after handling or working in close proximity to the chemicals applied to tobacco farms.

Sixteen-year-old Musa, for example, said he used a tank and handheld sprayer to apply a liquid chemical to his family's tobacco farm in Garut, West Java, in 2015. He said he became very ill the first time he applied pesticides, after mixing the chemicals with his bare hands: The first time, I was vomiting. For two weeks, I couldn't work. I went to the doctor. The doctor told me to stop being around the chemicals. But how can I do that? I have to help my parents. Who else can help them but me? I mixed it with my hands. Suddenly I was dizzy. My parents told me to go home. I stayed home for two days, and my dad told me to rest for longer. It was a terrible feeling. For two weeks, I was always, always vomiting.

Rahmad, a 10-year-old boy, described being exposed to pesticides while working on his family's farm in Sampang, East Java, in 2015. When my brother is spraying, I am cleaning the weeds. It stinks. It smells like medicine. I feel sick. I feel headaches, and not good in my stomach. I'm in the same field. Every time I smell the spray I feel dizzy and nauseous.

Children are uniquely vulnerable to the adverse effects of toxic exposures as their brains and bodies are still developing. Pesticide exposure has been associated with long-term and chronic health effects including respiratory problems, cancer, depression, neurologic deficits, and reproductive health problems. In particular, many pesticides are highly toxic to the brain and reproductive health system, both of which continue to grow and develop during childhood and adolescence.

Few of the children interviewed by Human Rights Watch said that they had received any education or training about the health risks of working in tobacco farming. Very few children said that they wore any type of protective equipment while handling tobacco, and many said they wore no or inadequate protective equipment while working with pesticides or other chemicals.

Many children described working in high heat on tobacco farms. Some children we interviewed said that they had fainted, and others said that they felt faint or dizzy or suffered headaches when working in very high temperatures. Working in extreme heat can place children at risk of heat stroke and dehydration, and children are more susceptible than adults to heat illness.

Most children interviewed reported that they suffered pain and fatigue from engaging in prolonged repetitive motions and lifting heavy loads. Some children also said they used sharp tools and cut themselves, or worked at dangerous heights with no protection from falls.

Most children interviewed by Human Rights Watch said they attended school and worked in tobacco farming only outside of school hours before and after school, and on weekends and school holidays. However, Human Rights Watch also found that work in tobacco farming interfered with schooling for some children.

A few children had dropped out of school before turning 15, the compulsory age for schooling in Indonesia, in order to work to help support their families. These children often said their families could not afford to put them through school, or relied on them to work. Even though the Indonesian government guarantees free public education, and interviewees in most communities said they did not have to pay school fees to attend public schools, the costs of books, uniforms, transportation to and from school were prohibitive for some families. For example, Sari, a bright-eyed, 14-year-old girl in Magelang, Central Java, told Human Rights Watch she dreamed of becoming a nurse, but she stopped attending school after sixth grade in order to help support her family. I want to go back to school to achieve my dreams for the future, but we don't have much money to do that.

Some children said they missed some days of school during busy times of the growing season. Eleven-year-old Rojo, the oldest child in his family, said he missed school to work in tobacco farming three or four times during the 2014 harvest season in Sampang, East Java: My dad asked me to go to the field earlier, and not go to school, he said. I was worried I wouldn't pass the exams.

Some children interviewed said they found it difficult to combine school and work, and described fatigue and exhaustion or difficulty keeping up with schoolwork. Awan, a slender 15-year-old boy from Pamekasan, East Java, described how he balanced school and work during the high season: When the harvest is coming, I have to wake up early in the morning, and I have to be [work] in the fields until 6:30 a.m., then go to school, and then continue in the fields in the afternoon. We go [to the fields] around 4:30 or 5 a.m. It's still dark, but I use a headlamp. I feel like I want to sleep longer. It's tiring. He told Human Rights Watch that this grueling schedule made it difficult for him to keep up with his schoolwork: It's harder to study than it is before the harvest, he said. It makes me so tired.

Under international law, the Indonesian government has an obligation to ensure that children are protected from the worst forms of child labor, including hazardous work, which is defined as 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.

Indonesia has ratified several international conventions concerning child labor, including the ILO Worst Forms of Child Labour Convention, the ILO Minimum Age Convention, and the United Nations (UN) Convention on the Rights of the Child (CRC). The ILO Worst Forms of Child Labour Convention requires member states to take immediate action to prevent children from engaging in the worst forms of child labor and to provide direct assistance for the removal of children already engaged in the worst forms of child labor.

Indonesia has strong laws and regulations regarding child labor, aligned with international standards, and has implemented a number of social programs to address child labor. Under Indonesian law, the general minimum age for employment nationwide is 15. Children ages 13 to 15 may participate in light work as long as the work does not interfere with their physical, mental, or social development. Indonesian labor law prohibits hazardous work by everyone under 18, and a 2003 decree from the Minister of Manpower and Transmigration details the list of specific tasks that are prohibited for children under 18. The list explicitly prohibits children from working in environments with harmful chemical substances. Under this provision, any work involving direct contact with tobacco in any form should be considered prohibited due to the high probability of exposure to nicotine and pesticides.

However, gaps in the legal and regulatory framework, and inadequate enforcement of child labor laws and regulations leave children at risk. The Indonesian government's hazardous work list does not specify that the prohibition on children's work with harmful chemical substances includes work handling tobacco, despite the dangers of nicotine exposure. This ambiguity leaves children vulnerable.

In addition, the government of Indonesia does not effectively enforce child labor laws and regulations in the small-scale farming sector. The Ministry of Manpower and Transmigration, the agency responsible for the enforcement of child labor laws and regulations, has about 2,000 inspectors carrying out labor inspections nationwide, in all sectors, far too few for effective labor enforcement in a country of more than 250 million people. In a meeting with Human Rights Watch, a ministry representative explained that labor inspections are done only in large-scale agro-industry, not in the small-scale agricultural sector where the vast majority of children interviewed for this report worked.

While governments have the primary responsibility to respect, protect, and fulfill human rights under international law, private entities, including businesses, also have a responsibility to avoid causing or contributing to human rights abuse, and to take effective steps to ensure that any abuses that do occur are effectively remedied. This includes a responsibility to ensure that businesses' operations do not use, or contribute to the use of, hazardous child labor.

The United Nations (UN) Guiding Principles on Business and Human Rights, which the UN Human Rights Council endorsed in 2011, maintain that all companies should respect human rights, avoid complicity in abuses, and ensure that any abuses that occur in spite of these efforts are adequately remedied. The guidelines, widely accepted as an authoritative articulation of businesses' human rights responsibilities, specify that businesses should carry out effective human rights due diligence, a process to identify potential risks of human rights abuse connected to their operations and take effective steps to prevent and mitigate negative human rights impacts linked to their operations. Businesses also have a responsibility to ensure that the victims of any abuses that occur in spite of these efforts are able to secure an appropriate remedy.

Tobacco grown in Indonesia enters the supply chains of Indonesian tobacco companies of various sizes, as well as the world's largest multinational tobacco companies. The largest companies operating in Indonesia include three Indonesian tobacco manufacturers: PT Djarum (Djarum), PT Gudang Garam Tbk (Gudang Garam), and PT Njorono Tobacco International (Njorono), and two companies owned by multinational tobacco manufacturers: PT Bentoel Internasional Investama (Bentoel), owned by British American Tobacco (BAT), and PT Hanjaya Mandala Sampoerna Tbk (Sampoerna), owned by Philip Morris International. Other Indonesian and multinational companies also purchase tobacco grown in Indonesia, as described below.

Tobacco farmers interviewed by Human Rights Watch sold tobacco in a number of ways. Most farmers sold tobacco leaf on the open market through intermediaries, or middlemen. In this system, small farmers described selling tobacco to a central farmer or leader in the village, or a local buyer, who would pool tobacco from many small producers and sell it to warehouses owned by local businessmen or by larger national or multinational companies purchasing tobacco leaf.

As an alternative to this system, some farmers had relationships with individual tobacco companies and had opportunities to sell tobacco directly to representatives of the company, rather than through intermediary traders. Under this system, some farmers signed written contracts to sell tobacco directly to tobacco product manufacturing or leaf supply companies.

Human Rights Watch interviewed more than 60 tobacco farmers, tobacco leaf buyers and sellers, and warehouse owners in the four provinces where we conducted research. We identified human rights risks, including child labor and occupational health and safety hazards, in both the open market system and the direct contracting system.

Most farmers and traders selling tobacco exclusively through the traditional open market system acknowledged that it was common for children to work in tobacco cultivation. Most of them stated that neither the government nor those purchasing tobacco leaf had ever communicated with them regarding child labor standards or expectations. Interviewees said that they were not aware of any attempts on the part of buyers, including companies with explicit policies that prohibit child labor, to verify the conditions in which tobacco was grown or inspect for child labor.

Farmers producing and selling tobacco through the direct contracting system said that they had received some training and education about child labor and health and safety from the tobacco companies with whom they contract. At the same time, Human Rights Watch found that companies human rights due diligence practices were not sufficient to eliminate hazardous child labor in the supply chain. Most farmers in the direct contracting system reported that children under 18 still participated in many tobacco farming tasks, and some farmers insisted there were no restrictions at all on childrens work in tobacco farming. Most farmers said there was no meaningful consequence or penalty if children were found working, even in the event of repeated violations. In the absence of any meaningful penalties, many farmers largely disregarded any efforts by companies to dissuade them from allowing children to work.

Human Rights Watch found that companies purchasing tobacco on the open market and through the direct contracting system risk purchasing tobacco produced by children working in hazardous conditions.

Human Rights Watch sought information regarding the human rights due diligence policies and procedures of 13 companies, including four Indonesian tobacco product manufacturers, seven multinational tobacco product manufacturers, and two multinational leaf merchant companies. Ten companies responded. Of the four Indonesian tobacco companies, two replied (Nojorono and Wismilak), but neither provided a detailed or comprehensive response to the questions we posed. A representative of Wismilak sent an email to Human Rights Watch stating that the company could not respond in detail because it is not directly connected with the tobacco farmers, but did not identify other actors in the supply chain who are directly in contact with growers. Nojorono replied in a letter and referred Human Rights Watch to GAPPRI (Gabungan Perserikatan Pabrik Rokok Indonesia), a cigarette manufacturers association, for information regarding tobacco farming, including child labor. Human Rights Watch subsequently wrote to GAPPRI, but they declined to meet with us. The largest Indonesian tobacco companies, Djaram and Gudang Garam, did not respond to Human Rights Watch, despite repeated attempts to reach them.

All of the multinational companies purchasing tobacco from Indonesia that responded to Human Rights Watch have child labor policies that are largely aligned and appear consistent with international standards, in particular key ILO conventions. However, none of the companies prohibit children from performing all tasks that could pose threats to their health and safety. This means that none of the companies have policies sufficient to ensure that all children are protected from hazardous work on tobacco farms in their supply chains.

Human Rights Watch analyzed the information on human rights due diligence provided by those companies that responded to our letters. Few of the companies are sufficiently transparent regarding their human rights due diligence procedures, particularly regarding their monitoring of their child labor policies throughout the supply chain, as well as the results of internal monitoring and external audits. Transparency is a key element of effective and credible human rights due diligence. Among the companies we studied, Philip Morris International appears to have taken the greatest number of steps to be transparent about its human rights policies and monitoring procedures, including by publishing on its website its own progress reports as well as several detailed reports by third party monitors.

Most multinational tobacco companies operating in Indonesia source tobacco through a mix of direct contracts with farmers and purchasing tobacco leaf on the open market, with some companies relying more heavily on one or the other purchasing model. Many companies acknowledged that they carry out little or no human rights due diligence in the open market system. However, all companies sourcing tobacco from Indonesia have responsibilities to carry out robust human rights due diligence activity and ensure that their operations do not cause or contribute to human rights abuse, even in complex, multilayered supply chains. Although most of the companies who responded to Human Rights Watch acknowledged child labor and other human rights risks in the open market system, none of the companies described having procedures in place that are sufficient to ensure that tobacco entering their supply chains was not produced with hazardous child labor.

Based on the findings documented in this report, our analysis of international standards and public health literature, and interviews with experts on farmworker health, Human Rights Watch believes that any work involving direct contact with tobacco in any form should be considered hazardous and prohibited for children under 18, due to the health risks posed by nicotine, the pesticides applied to the crop, and the particular vulnerability of children whose bodies and brains are still developing.

We recognize that small-scale farming is an important part of Indonesias agricultural sector, and that in some areas, children have participated in family farming for generations. Though it may take time to change attitudes and practices around childrens role in tobacco farming, significant change is possible. In Brazil the worlds second-largest tobacco producer and a country, like Indonesia, where tobacco is cultivated largely on small family farms Human Rights Watch found that a strict and clear government ban on child labor in tobacco farming, and comprehensive health and safety education and training, were helping to eliminate hazardous child labor in the crop. The Brazilian government had established meaningful penalties for child labor violations, applied both to farmers and the companies purchasing tobacco from them, and the penalties pushed people to end or limit their childrens work on the farm. Indonesian authorities should take note of this approach.

As part of its efforts to eradicate the worst forms of child labor by 2022, the government of Indonesia should update its list of hazardous occupations for children, or enact a new law or regulation, to prohibit explicitly any work involving direct contact with tobacco in any form. There may be some light work on tobacco farms that is suitable for children, particularly in the early stages of tobacco production. For example, planting tobacco while wearing suitable gloves or watering tobacco plants with small, lightweight buckets or jugs could be acceptable tasks for children, as long as they were not working in extreme heat or dangerous conditions, and the work did not interfere with their schooling. However, Human Rights Watch believes that many aspects of tobacco farming in Indonesia constitute hazardous child labor under international standards, particularly most tasks involved in topping, harvesting, and curing tobacco, as there is no viable way to limit childrens direct contact with tobacco during these stages of production.

The government should vigorously investigate and monitor child labor and other violations in small-scale agriculture, including through unannounced inspections at the times and locations at which children are most likely to be working.

In addition, Indonesian authorities should take immediate steps to protect child tobacco workers from danger. The government should implement an extensive public education and training program in tobacco farming communities to promote awareness of the health risks to children of work in tobacco farming, particularly the risks of exposure to nicotine and pesticides.

All companies purchasing tobacco from Indonesia should adopt or revise global human rights policies prohibiting hazardous child labor anywhere in the supply chain, including any work in which children have direct contact with tobacco in any form. Companies should establish or strengthen human rights due diligence procedures with specific attention to eliminating hazardous child labor in all parts of the supply chain, and regularly and publicly report on their efforts to identify and address human rights problems in their supply chains in detail.

Human Rights Watch conducted field research for this report in 2014 and 2015 in tobacco farming communities in 10 different districts located in four provinces of

Indonesia: West Java, Central Java, East Java, and West Nusa Tenggara.

During three research trips between September 2014 and September 2015, Human Rights Watch interviewed 132 children ages 8 to 17 who reported working on tobacco farms, including 10 children in West Java, 19 children in Central Java, 88 children in East Java, and 15 children in West Nusa Tenggara.

In addition, Human Rights Watch interviewed 88 other individuals, including parents of child workers, tobacco farmers, tobacco leaf buyers and sellers, warehouse owners, village leaders, health workers, representatives of nongovernmental organizations, and others. In addition, we met or corresponded with officials from several government bodies, including the Ministry of Manpower and Transmigration, the Ministry of Health, the Ministry of Agriculture, the Ministry of Education, and the Indonesian Child Protection Commission. In total, Human Rights Watch interviewed 227 people for this report.

Human Rights Watch identified interviewees through outreach in tobacco farming communities, and with the assistance of journalists, researchers, local leaders, and organizations serving farming families.

Interviews were conducted in Indonesian, Javanese, Madurese, Sasak, or Balinese with the help of interpreters. Human Rights Watch interviewed most children individually, though some children were interviewed in small groups. When possible, Human Rights Watch held interviews in private, though in a few cases, interviewees preferred to have another person present.

Human Rights Watch informed all interviewees of the purpose of the interview, its voluntary nature, and the ways in which the information would be collected and used. Human Rights Watch did not provide anyone with compensation in exchange for an interview. Many of the children interviewed were provided with a few food items to share with their families, as is culturally appropriate.

Participants gave oral informed consent to participate and were assured anonymity. Interviews were semi-structured and covered a range of topics related to health, safety, and education. Most interviews lasted 30 to 60 minutes, and all interviews took place in person.

The names of interviewees have been changed to protect their privacy, confidentiality, and safety. All of the accounts reported here, unless otherwise noted, reflect experiences children had while they were working on tobacco farms in 2014 or 2015.

Human Rights Watch also analyzed relevant laws and policies and conducted a review of secondary sources, including statistical reports prepared by the Indonesian government, data compiled by the Food and Agriculture Organization of the United Nations, public health studies, and other sources.

In November 2015, Human Rights Watch sent letters to nine multinational tobacco manufacturing and leaf supply companies, and four Indonesian companies to share our research findings and request information on each company's policies and practices regarding child labor in Indonesia. Our correspondence with the companies can be found in the appendix to this report, available on the Human Rights Watch website.

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 Labour 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.

As described below, children interviewed for this report said they worked in a variety of different situations on tobacco farms, including as unpaid workers on farms owned or operated by their family members, as hired workers, and as part of labor exchanged between families. Throughout the report, we use the terms worker or farmworker to refer to children working in any of these circumstances. In general, we use the term farmer to refer to the person with primary responsibility for a farm's operations.

Indonesia is a large and diverse country, and Human Rights Watch did not use a random sampling method. The children we interviewed may not be representative of the broader population of child tobacco workers nationwide. Still, Human Rights Watch observed patterns and similarities in our field research in four provinces of Indonesia over the course of two tobacco growing seasons (2014 and 2015). While specifying the number of children performing hazardous work in tobacco farming in Indonesia is beyond the scope of the methodology used here, our research strongly suggests that many children in Indonesia beyond those we interviewed are working in similarly hazardous conditions on tobacco farms.

According to the Food and Agriculture Organization of the United Nations, Indonesia is the world's fifth largest producer of unmanufactured tobacco, behind China, Brazil, India, and the United States.^[2] Most of the tobacco leaf produced in Indonesia is used for domestic production, but a large quantity of leaf is also exported.^[3] In 2013, for example, Indonesia exported about one-fourth of the country's total tobacco production, an export value of almost US\$200 million.^[4]

The Indonesian Ministry of Agriculture reports that tobacco is grown in 15 of the country's 34 provinces, but almost 90 percent of the tobacco produced in Indonesia is sourced from three provinces: East Java, Central Java, and West Nusa Tenggara.^[5] The vast majority of Indonesia's tobacco—98 percent—is grown by smallholders,^[6] farmers that own or operate small plots of land, usually no more than a few hectares, and sometimes less than one hectare.^[7]

According to data from the World Bank, Indonesia had a total population of 254.5 million people in 2014, and 34.3 percent of people of working age were involved in agricultural work that year.^[8] In 2014, there were a total of 543,181 tobacco farmers in Indonesia.^[9]

Several types of tobacco are grown in Indonesia, including Virginia (or flue-cured), burley, oriental, and other varieties. Indonesia is a vast country, and tobacco farming and curing practices vary depending on the climate and terrain of the region and the types of tobacco grown.

In the areas where Human Rights Watch conducted research, farmers typically cultivate small plots of land that they or their families own or rent, and rotate tobacco with several other crops at different times of the year, such as rice or vegetables, depending on variations in rainfall. Many farmers grow tobacco to sell for profit and cultivate rice and other crops primarily for their own consumption.

Most farmers, even farmers cultivating small plots of land, rely on labor from outside of their immediate families to grow tobacco. Families often send adults and children exchanged work days with many of their neighbors or hired day laborers to work during the labor-intensive parts of the growing season. In the description that follows, we refer to all individuals working in tobacco farming as farmworkers, a term meant to encompass family labor, exchange labor, and hired labor.

The tobacco growing season begins near the start of the dry season in May or June when farmworkers till soil to prepare fields, and plant tobacco seeds in small beds. Farmworkers tend to the seedlings until they are a few centimeters tall, and then transplant them by hand into fields.

After planting the seedlings in fields, farmworkers water the tobacco plants by hand every day, or multiple times a day, for several weeks, often using buckets attached to a wooden frame worn across the shoulders. They maintain the tobacco until it is mature enough to harvest—pulling weeds by hand or with sharp hoes, removing worms and insects by hand, and applying fertilizers and pesticides as needed at various points in the season. In some communities, farmworkers top the tobacco (break off large flowers that sprout at the tops of plants) and remove nuisance leaves to help the plant grow.

In the areas visited by Human Rights Watch, farmworkers harvest tobacco leaves entirely by hand, often in stages, through a series of separate harvests starting from the bottom of the plant. Farmworkers pick the tobacco leaves off of the stalks, gather them under their arms, and load them into sacks to be transported to barns or homes for curing.

Human Rights Watch observed a variety of curing methods in different regions of Indonesia. In many communities in East Java and Central Java, tobacco is sun-cured, or dried in the sun. Farmworkers stack and fold harvested leaves into small bundles, leave the bundles to dry for a few days indoors, and then thinly slice the tobacco with sharp knives and spread it on bamboo mats to dry in the sun. When the tobacco has dried, workers then roll and compress it into large sacks in preparation for selling. In other parts of East Java, farmworkers dry tobacco by piercing four to five tobacco leaves and stringing them onto small, sharp bamboo sticks and leaving them in fields to dry before preparing them for selling.

In West Nusa Tenggara, most farmers interviewed cultivated Virginia, or flue-cured tobacco, which is dried in heated curing barns. Farmworkers typically tie harvested leaves to wooden sticks with string, and then load the sticks of leaves into the rafters of brick curing barns heated by fire. Workers maintain fires in small ovens external to the barns that distribute heat through pipes (flues). The leaves are dried in barns for several days before being removed. In these areas, farmworkers classify cured leaves into several categories according to the color and size of the leaves, and compress them to form bales.

Although the sale of tobacco products to children is prohibited by law, more than one-third of boys ages 13 to 15 in Indonesia currently use tobacco products.^[10] According to the Ministry of Health, more than 3.9 million children ages 10 and 14 become smokers every year, and at least 239,000 children under the age of 10 have started smoking.^[11] Smoking increases rapidly among adults, with nearly three of four males ages 15 and older smoking. By contrast, roughly 5 percent of women and girls ages 15 and older smoke.^[12]

More than 40 million Indonesian children under 15 are exposed to passive smoking.^[13] According to the World Health Organization (WHO), passive smoking can increase the risk of lung cancer in nonsmokers by between 20 and 30 percent, and the risk of heart disease by 25 to 35 percent.^[14] Secondhand smoke also increases the risk of sudden infant death syndrome (SIDS), and may cause serious health problems in children, including more frequent and severe asthma attacks, respiratory infections, and ear infections.^[15]

Despite these outcomes, Indonesia is one of the few countries in the world that has not become a party to the World Health Organizations Framework Convention on Tobacco Control.^[16] a global public health treaty that aims to protect present and future generations from the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke.^[17] National laws permit many types of tobacco advertising, promotion, and sponsorship.^[18] The 2014 Global Youth Tobacco Survey, a nationally representative school-based survey of nearly 6,000 seventh to ninth-grade students in Indonesia, found that more than 60 percent of students saw tobacco advertisements or promotions at points of sale, or saw tobacco use on television, videos, or movies. Almost 10 percent of respondents said they owned something with a tobacco brand logo on it.^[19]

Kretek, cigarettes made from a combination of tobacco and ground cloves, are particularly popular in Indonesia and have been used there since the 1800s. A 2015 study of *kretek* smoking in Indonesia found an estimated 90 percent of adult smokers consumed *kretek*, which, like all tobacco products, are associated with serious health consequences.^[20] WHO estimates that tobacco use kills up to half of its users more than five million people worldwide, and roughly 240,000 people in Indonesia, each year.^[21]

The International Labour Organization (ILO) estimates that more than 1.5 million children ages 10 to 17 work in agriculture in Indonesia each year.^[22] The United States Department of Labor (DOL) reports that more than 60 percent of working children ages 10 to 14 in Indonesia are involved in the agricultural sector, including in fishing, as well as in the production of rubber, palm oil, and tobacco.^[23] In a meeting with Human Rights Watch, the Ministry of Manpower and Transmigration, the government institution responsible for labor issues, told Human Rights Watch it estimates about 400,000 children nationwide are involved in child labor in fishing and agriculture.^[24] According to ILO, East Java and Central Java are the provinces with the largest incidence of child labourers in agriculture.^[25]

Human Rights Watch could not find any official estimates of the number of children involved in child labor in tobacco farming in Indonesia each year. We requested information from both the Ministry of Manpower and Transmigration and the Ministry of Agriculture regarding the number of children estimated to be working in tobacco farming, and neither office could provide relevant data.^[26]

Consistent with the findings of other reports on child labor in tobacco farming in Indonesia,^[27] most of the children interviewed by Human Rights Watch started working in tobacco farming before age 15, the minimum age for employment in Indonesia.^[28] Approximately three quarters of the child tobacco workers we interviewed began working in tobacco farming by age 12.^[29]

Children interviewed by Human Rights Watch for this report said they performed one or more of the following tasks while working on tobacco farms:^[30]

Most child tobacco workers interviewed for this report worked on small plots of land farmed by their parents or other family members. They typically said they worked alongside their parents, siblings, and other family members, and often worked on other crops as well, such as rice or vegetables. In addition to working on land farmed by their own families, many children also worked on land farmed by their neighbors and other members of their communities. Some children said they work on up to 20 other families farms. Some children did not receive any compensation for their work, either because they worked for their own families or exchanged labor with other families in their communities. Other children received wages, as described below.

Regardless of the circumstances of their work, child tobacco workers generally reported participating in a range of tasks on tobacco farms depending on the type of tobacco grown and the curing process utilized in the region. Most children worked throughout the season, from planting through the harvest and curing process. In some communities, work in tobacco farming was gendered, with certain tasks performed primarily by women and girls, and other tasks performed primarily by men and boys.

Some child tobacco workers did not receive any compensation for their work, either because they worked for their own parents, or because their families exchanged work days with other farmers in their communities. For example, Agus, a 17-year-old boy in Magelang, Central Java, who had left school and hoped to become a successful farmer, explained that his family trades work with the neighbors in his village. I work for the neighbors. If I have the chance, I help the neighbors with planting and harvesting. I dont get paid because the neighbors also help my parents in their field. Interlocking his fingers, he added, Its brotherhood around here. We help each other.^[31]

Awan, a 15-year-old tobacco worker in Pamekasan, East Java, described a similar system between his family and the other families in his village. When asked if he was paid when working for his neighbors, he said, No, they never pay me. They give me bread or drinks. I have to help them because if I help them, theyll help me too. We have to help each other finish the harvest before it [the tobacco] turns yellow [spoils].^[32]

Kristina, a 17-year-old girl with a narrow face, played with her mauve scarf while she described the labor exchange in her Pamekasan, East Java, community: I help other neighbors who plant tobacco besides my parents because they will help me and my family when the harvest comes. We dont need pay from the neighbors. Otherwise my dad would lose a lot of money paying them back. My dad cant afford to pay a lot of neighbors [to work on his farm], so he asks me to help them. We dont take money from the neighbors.^[33]

Human Rights Watch interviewed 17-year-old Matius outside his familys home in Pamekasan, East Java, in 2015. He described a similar system, The tradition here is helping each other, so I help my neighbors and all of my family. Sometimes they give me money. But sometimes we have to pay it back by exchanging work. Like if Im harvesting now, my neighbors will help me, and when they harvest, my family will help them, without paying.^[34]

Other children said they were paid a daily rate for their work, most often when working for neighbors or extended family members. Among the children who were paid, most reported earning modest wages ranging from 5,000 rupiah (US\$0.35) to 20,000 rupiah (\$1.45) for a few hours of work, depending on the task they performed.^[35] Children who worked longer hours reported earning approximately 20,000 to 50,000 rupiah (\$1.45 to \$3.60) per day.^[36] Some interviewees reported that men and boys were paid higher daily wages than women and girls.^[37]

Some children in East Java and West Nusa Tenggara said their neighbors or extended family members paid them piece rate wages for tying or stringing tobacco leaves to bamboo sticks before curing, often 1,000 rupiah (\$0.07) for 8 to 12 sticks of leaves. They reported that they earned between 12,000 and 30,000 rupiah (\$0.85 to \$2.15) per day for a few hours of such work.^[38]

Children in all four of the provinces where Human Rights Watch carried out research said that they worked in tobacco farming to help their families. Many parents and children also described a long tradition in their communities of children participating in small-scale family farming.

The World Bank reports that 14.2 percent of Indonesias rural population lives below the national poverty line, almost double the urban poverty rate.^[39] According to the ILO International Programme on the Elimination of Child Labour (IPEC), poverty is the main cause of child labor in agriculture worldwide.^[40] Human Rights Watch research found that family poverty contributed to childrens participation in tobacco farming in Indonesia.

Many farmers interviewed for this report said tobacco was the main crop they cultivated for profit, as they used other crops primarily for subsistence. Some said they struggled to survive on the earnings from the tobacco season. Many said they carried debts to neighbors or family members, and described seasons in which they did not make the profit they had hoped for due to bad weather, an excess supply of tobacco, or other factors. One farmer interviewed by Human Rights Watch in Temanggung, Central Java, explained that excess supply drove down the price of tobacco in 2014: The rate is low because a lot of farmers are growing tobacco. This is the last year I want to sell tobacco. Its really hard, and I lost a lot of money.[\[41\]](#) Many farmers noted that they had little control over the price and classification of the tobacco, which determined their earnings.

Many children said they worked because they wanted to help their parents maintain the farm and provide for the family, and some felt their work could help their families save time and money from the cost of hiring laborers. Human Rights Watch interviewed Ratih, an 11-year-old girl who works on her parents tobacco farm in Jember, East Java, after she returned home from sports practice one morning in 2015. I feel sorry for my parents that theyre working, she said. So I help them I want to help my parents make a living.[\[42\]](#) Ratih is one of four children in her family. Her mother explained that she started bringing her children to the fields with her when they were young, in part so that she and her husband did not have to hire laborers at every stage of the growing season, and in part so she could watch over the children while she worked in the fields. My kids help us in the field because it costs a lot of money to ask someone to water the tobacco. So since they were [young] kids, my girls have been going to the field to help me and play there. I cant take care of my girls here [at home] while Im working in the fields, so I bring them with me.[\[43\]](#)

My kids are helping me in the field so I can save money on labor, said Ijo, a farmer in his mid-40s and father of four interviewed in Garut, West Java, in 2015. He said he was conflicted about his 12-year-old son helping him on the farm. Of course I dont want my kids working in tobacco because theres a lot of chemicals on it, and it could harm my kids. But they wanted to work, and we are farmers. I need more money to pay the laborers. But my son can help all season. You can imagine that I can save a lot of money when he joins me in the field. Its complicated.[\[44\]](#)

Some children used their earnings to help their families purchase food and other basic necessities. Sari, a 14-year-old girl who stopped attending school after sixth grade in order to work on farms in Magelang, Central Java, told Human Rights Watch in 2014, Im working to help my parents and family buy food and anything else they need. Sinta, a 13-year-old girl who works in the same village, said, I work so I can help my parents, to make life easier. To make it not such a difficult life.[\[45\]](#)

Other children worked to raise money for their school books or uniforms, or for snacks and meals at school. Human Rights Watch interviewed 13-year-old Utari, a small girl who wore gold earrings and a yellow shirt and shorts, in Probolinggo, East Java, in 2014. She said she used the wages she earned bundling tobacco leaves to pay for her school supplies: I use my earnings to pay for school. I use the money to buy books and my uniform. My books cost 24,000 rupiah [approximately US\$1.75 per semester]. I buy the books myself, she said.[\[46\]](#)

In addition to family poverty, ILO-IPEC cites traditional attitudes towards childrens participation in agricultural activities as a cause of child labor.[\[47\]](#) Many people interviewed for this report stated that it was common for children to work in the fields as part of traditional family farming practices. As a tradition as farmers, our children go to the fields to be a small help, said Hanif, a 45-year-old farmer in Probolinggo, East Java, interviewed by Human Rights Watch in 2015.[\[48\]](#) Maya, a farmer and mother of six children ages 9 to 28 in Garut, West Java, explained why her children helped on her farm. Its common here, and they help a lot. Sometimes we dont have much money to pay laborers, she said. We are farmers.[\[49\]](#)

While not all work is harmful to children, the International Labor Organization (ILO) defines hazardous work as 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.[\[50\]](#) The ILO considers agriculture one of the three most dangerous sectors in terms of work-related fatalities, non-fatal accidents, and occupational diseases.[\[51\]](#)

Human Rights Watch found that many aspects of tobacco farming in Indonesia pose significant risks to childrens health and safety, consistent with our findings on hazardous child labor in tobacco farming in the United States.[\[52\]](#) Children working on tobacco farms in Indonesia are exposed to nicotine, toxic pesticides, and extreme heat. The majority of children interviewed for this report described sickness while working in tobacco farming, including specific symptoms associated with acute nicotine poisoning, pesticide exposure, and heat-related illness, as described below. Some children also reported respiratory symptoms, skin conditions, and eye irritation while working in tobacco farming.

Most children interviewed for this report suffered pain and fatigue from engaging in prolonged repetitive motions and lifting heavy loads. Some children also said they used sharp tools and cut themselves, or worked at dangerous heights with no protection from falls. Many children slipped and fell while working in wet, muddy fields, in some cases splashing themselves with chemicals they were carrying in buckets or tanks.

Few of the children interviewed by Human Rights Watch said that they had received any education or training about the health risks of working in tobacco farming. Very few children wore any type of protective equipment while handling tobacco, and many wore no or inadequate protective equipment while working with pesticides or other chemicals.

All children interviewed for this report described handling and coming into contact with tobacco plants and leaves at various points in the growing season. Nicotine is present in tobacco plants and leaves in any form,[\[53\]](#) and public health research has shown that tobacco workers absorb nicotine through their skin while handling tobacco.[\[54\]](#) Studies have found that non-smoking adult tobacco workers have similar levels of nicotine in their bodies as smokers in the general population.[\[55\]](#)

In the short term, absorption of nicotine through the skin can lead to acute nicotine poisoning, called Green Tobacco Sickness. The most common symptoms of acute nicotine poisoning are nausea, vomiting, headaches, and dizziness.[\[56\]](#)

Approximately half of the children we interviewed in Indonesia in 2014 or 2015 reported experiencing at least one specific symptom consistent with acute nicotine poisoning while handling tobacco, including nausea, vomiting, headaches, and dizziness. Children said they experienced these symptoms while removing flowers and competing leaves from tobacco plants, harvesting leaves, carrying harvested leaves, wrapping or rolling leaves to prepare them for drying, working in curing barns, and working with dried tobacco.[\[57\]](#)

Some children in East Java, Central Java, West Java, and West Nusa Tenggara described nausea and vomiting while working in tobacco farming.

Some children said they vomited while harvesting tobacco leaves. For example, Wani, 16, and Nina, 18, have been working together on tobacco farms in Sampang, East Java, for several years. Wani, who wore a delicate black lace headscarf, told Human Rights Watch she vomited while harvesting in 2014: Ive been vomiting from the smell of the tobacco leaf. And Ive gotten a headache too. Nina also said she vomited while harvesting wet tobacco leaves in 2014: The wet leaves are smellier than the dry leaves, she explained. Thats what made me throw up.[\[58\]](#)

Aman, 18, has been helping on his fathers tobacco farm in Sumenep, East Java, since he was in junior high school. He said he got violently ill while harvesting tobacco in 2014 and had to seek medical treatment at the hospital: I was vomiting but I couldnt get it out, it was stuck in my throat. It happened twice. Last year and the year before. I went to the hospital both times. Last year was the worst. They gave me oxygen and an IV [intravenous therapy]. It felt like hot in my stomach and then I was dizzy all the time.[\[59\]](#)

Thirteen-year-old Ayu, one of five children in her family, told Human Rights Watch she vomits every year while harvesting tobacco on farms in her village near Garut, West Java: I was throwing up when I was so tired from harvesting and carrying the [harvested tobacco] leaf. My stomach is like, I cant explain, its stinky in my mouth. I threw up so many times. My dad carried me home. It happened when we were harvesting. It was so hot, and I was so tired. The smell is not good when were harvesting. Im always throwing up every time Im harvesting.[\[60\]](#)

Some children had never vomited, but said they often felt nauseated and queasy while working around tobacco. Rio, a tall 13-year-old boy, worked on tobacco farms in his village in Magelang, Central Java, in 2014. He told Human Rights Watch, After too long working in tobacco, I get a stomachache and feel like vomiting. Its from when Im near the tobacco for too long. He likened the feeling to motion sickness, saying Its just like when youre on a trip, and youre in a car swerving back and forth.[\[61\]](#)

Eddi, 16, stopped going to school in fifth grade in order to help his parents on their farm in Magelang, Central Java. He told Human Rights Watch he got sick while harvesting tobacco in 2014: When I take off the leaves, the leaves have a liquid and its smelly. I have to harvest a lot of leaves. I feel weak and I get a headache. He also suffered nausea during the harvest: I feel queasy, he said. My stomach hurts.[\[62\]](#)

Indirah, a 14-year-old girl whose parents work as hired laborers on several tobacco farms in Jember, East Java, said she feels nauseated every year during the tobacco harvest: When Im picking the leaves, I feel like I want to throw up. Its an uncomfortable feeling. Its just like nausea. It happened last season. Mostly every season I feel like that. I havent thrown up, but I feel queasy. Its uncomfortable.[\[63\]](#)

Other children reported nausea and vomiting while bundling and sorting harvested or dried tobacco leaves, or working in curing barns. For example, 14-year-old Leah said she vomited in a tobacco field during the harvest in 2014, and again, later in the season, while she was sorting and bundling harvested leaves in her village in Garut, West Java. When were choosing [classifying and bundling] tobacco leaves, its dirty. Last season, I was throwing up. It was so painful in my stomach. It felt like burning and my throat, it was so hard to swallow.[\[64\]](#) Her mother explained, [When we are] wrapping leaves, the smell is so strong. I know [she] was vomiting because the smell was so strong.[\[65\]](#)

Nadia, a 16-year-old girl in Bondowoso, East Java, whose parents grow chili, corn, rice, tomatoes, and tobacco, said she vomits every year in the harvest season while bundling and sorting harvested tobacco leaves with other women and girls in her village. Sometimes I get a headache. Sometimes Im even throwing up [It happens] when we string the leaves because were sitting in the middle of a bundle of tobacco. It happens when the tobacco is still wet and just coming from the fields. It only happens at the beginning of the season when we havent adapted yet. Every time its the beginning of the season, were throwing up.[\[66\]](#)

Thirteen-year-old Yulia, who worked in curing barns in East Lombok, West Nusa Tenggara, in 2014, said she felt queasy while carrying dried tobacco leaves. I feel sick to my stomach because I have to lean over and smell it [the tobacco] again and again, she said. She described painful dry heaving: It hurts because its like you want to throw up, but the food wont come out. Its better if you can actually throw up.[\[67\]](#) I was nauseous when I was loading the tobacco into the barn, said Riko, a 15-year-old boy who worked on his uncles tobacco farm in East Lombok, West Nusa Tenggara, in 2015. I dont know why it happened. I felt weak. I threw up two times behind the barn. Its happened more than once. This season, just one time. Last season, it happened two times.[\[68\]](#)

Children in all four of the provinces where Human Rights Watch carried out research described getting headaches, and feeling dizzy, lightheaded, and weak while handling tobacco at different stages of the production process.

Emilia, a 12-year-old girl who hopes to be a teacher, told Human Rights Watch that she felt lightheaded while stacking green tobacco leaves and wrapping them into bundles in her village in Probolinggo, East Java, in 2014. When Im wrapping, I feel dizzy and I get headaches. I feel like I see stars.[\[69\]](#) William, 16, said he got sick when topping tobacco in Sampang, East Java, in 2014. My body is like I dont know how to describe it. Like weak. Suddenly I feel like Ive lost all my energy. It happens when I cut the flowers.[\[70\]](#)

Human Rights Watch interviewed 14-year-old Raden while he was on a break from school in Sumenep, East Java, in June 2015. He described feeling dizzy and lightheaded while harvesting tobacco: When were harvesting, I often feel sick because of the smell of the wet tobacco leaves, and I get a strong headache. Sometimes its hard to breathe when theres a lot of tobacco leaves near me. I cant describe it. I get such a headache. Im dizzy. I see stars, and everything just looks bright.[\[71\]](#)

Peni, 13, started working in tobacco farming in her community in Magelang, Central Java, at age 12. When Im harvesting, I feel dizzy, she said, describing her work in 2014. Its because the tobacco leaf smells. Its like youve been spinning around.[\[72\]](#) Fourteen-year-old Topan also worked in Magelang, Central Java, in 2014, and described similar feelings when harvesting: I feel dizzy and get a headache when Im harvesting. It feels like throbbing in my head because of the smell and the heat.[\[73\]](#)

Yulia, age 13, worked with her younger sister and her cousin at tobacco curing barns in East Lombok, West Nusa Tenggara, in 2014. Sitting on the floor in her brown school uniform, she described getting headaches while working around dried tobacco. When I untie the dry tobacco, the smell is so bad, she said. It gives me a headache. I dont know how to explain it, but the smell makes my head feel so heavy, I just want to lie down. She also described feeling dizzy while working. It feels like Im seeing stars all over my head, and I just want to fall down. Its like an earthquake.[\[74\]](#) Dewi, 11, worked at the same East Lombok curing barns in 2014 and reported similar symptoms while working with dried tobacco. When I untie the tobacco, the smell goes right up my nose. It makes me dizzy, she told Human Rights Watch. When you feel dizzy, you hardly know what direction to go. Youre like swaying and dont know where you are.[\[75\]](#)

All of the child tobacco workers interviewed by Human Rights Watch were exposed to nicotine while handling and coming into contact with tobacco plants and leaves at various points in the growing season. Many children said their clothes got wet while working in fields of tobacco plants wet with morning dew. Working in wet, humid conditions increases the risk of nicotine poisoning as nicotine dissolves in the moisture on the leaf and is more readily absorbed through the skin.[\[76\]](#)

The experience of Dumadi, a 12-year-old worker in Garut, West Java, was typical among the child tobacco workers interviewed by Human Rights Watch: Its wet when we harvest. I use the ugliest clothes for harvesting because if I use my best clothes, theyll get dirty and black, so I have to use old clothes. Of course its wet. On sunny days, Im sweaty. And in the mornings, the tobacco has dew. My clothes get really wet. He said he looked drenched after returning home from the fields. Its as if it rained, he said.[\[77\]](#)

Some children said they felt sick while working in wet clothes. Fourteen-year-old Indirah in Jember, East Java, said, Its wet because theres still dew in the tobacco leaves. My clothes get wet. Its an uncomfortable feeling, and Im working in the sweaty clothes. She said she felt sick while working in wet fields, though she attributed her sickness to the smell of the tobacco: Its because theres a lot of leaves in the field. The smell of a lot of tobacco makes me sick.[\[78\]](#)

Sixteen-year-old David, a worker in Probolinggo, East Java, said working in wet clothes, as well as the tar from the tobacco leaf irritated his skin: When youre harvesting, your skin will be so dry and sticky from the glue [tar on the tobacco leaves]. He noticed particular irritation in the area under his arm where he held tobacco leaves: My skin sometimes it gets itchy on my underarm. When I take off the leaves, I carry them under my arms because the sacks are a little far from the field. So we have to carry a big bundle to the edge of the field. Thats why my clothes get wet because the tobacco leaves are wet. And its especially wet under my arm, he said, rubbing his upper torso.[\[79\]](#)

Most children said tobacco leaves left a black, sticky residue on their hands, and some said their hands smelled sour or tasted bitter while they ate, even after washing. For example, 10-year-old Farah, who started helping on her fathers Sampang, East Java, tobacco farm when she was 9, said, I dont wear gloves. My hands are black after Ive been taking off the leaves. The smell is like a chemical, and it feels sticky. She said the smell remained on her hands even after washing. When I finish helping my dad take off [harvest] the leaf, it tastes bitter in my mouth. When I come home for dinner, Ive already washed my hands, but the food tastes bitter.[\[80\]](#)

While Human Rights Watch cannot determine the exact causes of the illnesses reported by the children we interviewed without more detailed biological screening and examination, the symptoms presented above 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 contact with tobacco plants, particularly when plants are wet.[\[81\]](#) Research has shown nausea, vomiting, dizziness, and headaches are the most common symptoms of acute nicotine poisoning. [\[82\]](#)

Acute nicotine poisoning generally lasts between a few hours and a few days.[\[83\]](#) and although it is rarely life-threatening, severe cases may result in dehydration which requires emergency treatment.[\[84\]](#) 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.[\[85\]](#)

The long-term effects of nicotine absorption through the skin have not been studied, but public health research on smoking suggests that nicotine exposure during childhood and adolescence may have lasting consequences on brain development.[\[86\]](#) The prefrontal cortex, the part of the brain responsible for executive function and attention, is one of the last parts of the brain to mature and continues developing throughout adolescence and into early adulthood.[\[87\]](#) The prefrontal cortex is particularly susceptible to the impacts of stimulants, such as nicotine. Nicotine exposure in adolescence has been associated with mood disorders, and problems with

memory, attention, impulse control, and cognition later in life.[\[88\]](#)

Many child tobacco workers interviewed for this report said they handled or applied pesticides, fertilizers, or other chemical agents to tobacco farms in their communities, often without wearing suitable protective equipment. Some children also reported seeing other workers apply chemicals in fields in which they were working, or in nearby fields. A number of children reported immediate sickness after handling or working in close proximity to the chemicals applied to tobacco farms. They described a range of symptoms including nausea, vomiting, stomach pain, headaches, dizziness, skin irritation, rashes, coughing, and difficulty breathing.

Children in all four provinces where Human Rights Watch carried out research described mixing pesticides, sometimes with their hands, or applying pesticides or other chemical agents to tobacco plants using tanks, often worn on their backs, and handheld sprayers. Many of the children felt immediately ill after handling the chemicals, describing vomiting, headaches, dizziness, itchy skin, and other symptoms.

Musa, a 16-year-old boy who hopes to become a soccer player, said he used a tank and handheld sprayer to apply a liquid chemical to his familys tobacco farm in Garut, West Java, in 2015. He said he became violently ill the first he applied pesticides, after mixing the chemicals with his bare hands: The first time, I was vomiting. For two weeks, I couldnt work. I went to the doctor. The doctor told me to stop being around the chemicals. But how can I do that? I have to help my parents. Who else can help them but me? I mixed it with my hands. Suddenly I was dizzy. My parents told me to go home. I stayed home for two days, and my dad told me to rest for longer. It was a terrible feeling. For two weeks, I was always, always vomiting.[\[89\]](#)

Argo, 15, told Human Rights Watch he applied a liquid chemical to his parents tobacco farm in Pamekasan, East Java, in 2015. I pour it in the water, and I shake it up, and then I spray it all over the tobacco, he said. Theres a tank I wear on my back. He described an incident when he felt suddenly, acutely ill while applying pesticides without protective equipment: Once I was vomiting. It was when it was planting time, and I didnt use the mask, and the smell was so strong, I started throwing up. I drank water right after, but I had to keep working so my dad wouldnt get mad at me. It felt like something strange bubbling up in my throat.[\[90\]](#)

Last year, I started learning how to spray the fields, said Sartoro, 16, who has been working in tobacco farming for his parents, relatives, and neighbors in Probolinggo, East Java, since he was 13. I mix three of the small bottles [of liquid] with a big bucket of water and pour it into the tank. I get dizzy when I smell it. Its a headache like someone punched you in the head. It gives you pain in your stomach because the smell is so strong. I feel queasy.[\[91\]](#)

Sari, a 14-year-old girl who stopped attending school after sixth grade in order to work on her familys Magelang, Central Java, tobacco farm, told Human Rights Watch: I help my father spray with the tanks. I dont know how to mix the water with the pesticides, but Ive sprayed the plants with the pesticides after my father mixed it. It [the tank] hurts my shoulders. I feel bad when I spray. Its almost like Im going to pass out. It smells terrible.[\[92\]](#)

Fifteen-year-old Catur, a thin boy who started working in tobacco at age 12, told Human Rights Watch that he mixed and applied pesticides while working in Magelang, Central Java, in 2014: I use a tank that I put on my back. My right hand pumps the water and my left hand sprays the chemicals. I mix the chemicals into the water. I use one capful for each tank. I get dizzy because the smell is so bad. It happens often, very often. He added, The chemicals get on my skin. Its itchy.[\[93\]](#)

Rexi, 15, Topan, 14, and Michael, 15, are friends and worked together in tobacco farming in their Magelang, Central Java, village in 2014. Human Rights Watch interviewed the boys together, and all three said they mixed and applied pesticides to tobacco farms in 2014. Rexi told Human Rights Watch, The smell makes me feel sick. I get a stomachache and feel queasy when Im spraying the pesticides. Rexi also said the chemicals irritated his skin: My skin gets a rash when the chemicals get on it. I get red bumps on my hands because I mix it with my hands. Michael described a similar reaction to working with pesticides: I cant stand the smell. Its a bad smell, like overripe fruit. I get a headache when Im spraying. Its a really strong smell. It makes it hard for me to breathe. Topan also reported difficulty breathing while mixing and applying pesticides in 2014: Its too smelly, thats why its hard to breathe. So we have to work fast. Its like you cant get enough air.[\[94\]](#)

Some children slipped and fell while carrying buckets of water mixed with fertilizer or tanks or pesticides, and said the chemicals splashed onto their bodies. Sixteen-year-old Iggy, a child tobacco worker in Garut, West Java, told Human Rights Watch he fell while applying pesticides in 2015. He said the chemicals from the tank on his back splashed on his skin: I slipped when I was spraying because the field was full of water. I fell with the tank. All the water from the tank went everywhere and then the tank was empty. It got my back wet.[\[95\]](#)

Human Rights Watch interviewed Seto, 14, while he sat on the front porch of his familys Sampang, East Java, home, wearing his light blue school uniform. He said he fell while carrying buckets of water mixed with fertilizers to tobacco fields in his village in 2014. When I was watering, I fell down because I slipped in the field, he said. The water soaked all the way to my pants. I have a scar on my foot from when I fell. I was so sleepy after school when I was watering that I dropped the bucket and it cut my foot. It was bleeding. I was barefoot.[\[96\]](#)

A few children told Human Rights Watch that they mixed chemicals in a tank, and then their parents or other adult workers applied the chemicals. This task also made children feel sick. For example, Ayu, the 13-year-old girl quoted at the start of this report, worked on tobacco farms near her village in Garut, West Java. She told Human Rights Watch, I cannot wear the tank. My dad does that. I just help with the mixing. I just put three or four cups of the chemical in the bucket, put in the water, and mix it with [a piece of] wood, and my dad puts it in the tank. The smell is so strong. It makes my stomach sick.[\[97\]](#)

Leah, a 14-year-old girl who worked on tobacco farms in the same Garut, West Java, village, said she also mixed pesticides in 2015, I help to mix it. I have a big bucket of water. I use the wood to mix it. It smells so bad. Sometimes I get a bad headache when I mix it. The smell is stronger than chicken poop. I cant explain it, but when I mix it, it smells so bad, my head is just spinning. And when I open my eyes, [all I see is] black. I use my scarf to cover my nose. It helps, but then my scarf smells bad.[\[98\]](#)

Fourteen-year-old Indirah, whose parents work as hired laborers on tobacco farms in Jember, East Java, in 2015, also said she felt suddenly ill when mixing pesticides for her father in 2014: I wanted to throw up when I poured the liquid chemical into the tank and I shook the tank. Right at that moment, the smell got in my nose. I was mixing it for my dad. I almost vomited.[\[99\]](#)

Twelve-year-old Ramelan, a junior high school student in Garut, West Java, who works on his familys tobacco farm on his summer break from school, explained how he mixed tobacco for his father in 2015: I put chemicals in the bucket, mix it with the wood, throw it in the tank, and my dad will spray it. When asked about the chemical he used, he said, Its in a bottle. It helps the tobacco grow. He said he felt sick after mixing the chemicals: Its like I feel dizzy and get a headache because the smell is so strong. I thought I would fall down. He also said the chemicals irritated his skin: I use the wood so it doesnt get on my skin. Sometimes the tank leaks on my hand. It burns my skin. It burns and it itches.[\[100\]](#)

Many children interviewed by Human Rights Watch described working near areas where their parents or other workers were applying pesticides to tobacco fields. These children likely were exposed to pesticides through drift, when a pesticide applied in one area spreads to adjoining areas through the wind.[\[101\]](#) Children we interviewed said they could smell the chemical spray as it drifted toward them, and many felt immediately sick after coming into contact with the spray.

Ratih, an 11-year-old girl wearing her soccer uniform when Human Rights Watch met her near her familys farm in Jember, East Java, said, One time I was vomiting when I was nearby where they were spraying. My father was spraying in the west, and the wind was blowing toward me, and the taste was bitter on my tongue. I threw up once. My father told me to drink a lot of water, and he brought me home.[\[102\]](#)

When my brother is spraying, I am cleaning the weeds, said Rahmad, a 10-year-old boy who described being exposed to pesticides while working on his familys farm in Sampang, East Java, in 2015. It stinks. It smells like medicine. I feel sick. I feel headaches, and not good in my stomach. Im in the same field. Every time I smell the spray I feel dizzy and nauseous.[\[103\]](#)

Ade, 14, said he often worked in close proximity to adults applying pesticides to tobacco plants on farms near his village in Magelang, Central Java, in 2014. Sometimes Im only five meters away, he said. I got sprayed on my face once. He told Human Rights Watch that the chemicals made him feel queasy: Sometimes it gives me a bad stomachache. It feels bad.[\[104\]](#)

Similarly, 15-year-old Samuel, who left school after sixth grade, said he got very sick when his parents sprayed the field where he was working in Garut, West Java, in 2014: I was only a little ways away I was vomiting from the smell. I was in the field. It was bad, and then I had a headache. I lost my energy, and for a day, I felt so bad. I only threw up once, but it was a lot. I didnt go to the doctor. Its too much money. I can handle it.[\[105\]](#)

Human Rights Watch interviewed 13-year-old Natalia after she had been stringing tobacco leaves outside a curing barn in East Lombok, West Nusa Tenggara. She said she had been in close proximity to someone who sprayed her grandmothers tobacco field with a pesticide in 2015: When the plant is still young, there is someone who brings the spray tank with the chemical inside it and sprays the leaves. I just come to him to bring the water. Theres a smell. Its just smelly. I cant describe it. Sometimes I use my scarf to cover my nose. Without my scarf, I feel very, very dizzy. Its happened several times.[\[106\]](#)

Pesticides enter the human body when they are inhaled, ingested, or absorbed through the skin. Pesticides pose serious health risks to the individuals applying them, as well as to other individuals nearby.

Based on our field research, Human Rights Watch found child tobacco workers in Indonesia are exposed to pesticides by mixing and applying them, being sprayed accidentally, or through drift, when a pesticide applied in one area spreads to adjoining areas through the wind.[\[107\]](#) Research has shown tobacco workers may also suffer chronic exposure through contact with pesticide residues remaining on plants and in soil.[\[108\]](#) Human Rights Watch could not determine the precise toxicity of the chemicals involved in tobacco production in the communities we visited. However, pesticide exposure is associated with acute health problems including nausea, dizziness, vomiting, headaches, abdominal pain, and skin and eye problems.[\[109\]](#) Exposure to large doses of pesticides can have severe health effects including spontaneous abortion and birth deformities, loss of consciousness, coma, and death.[\[110\]](#)

Long-term and chronic health effects of pesticide exposure are well documented and include respiratory problems, cancer, depression, neurologic deficits, and reproductive health problems.[\[111\]](#) Children are uniquely vulnerable to the adverse effects of toxic exposures as their brains and bodies are still developing.[\[112\]](#) In particular, many pesticides are highly toxic to the brain and reproductive health system,[\[113\]](#) both of which continue to grow and develop during childhood and adolescence.[\[114\]](#)

While pesticides are applied to many crops on farms around the world, tobacco workers may be at especially high risk for pesticide exposure given the nature of work. The manual labor involved in the tobacco harvest in Indonesia requires workers to have extensive contact with tobacco leaves. Tobacco plants are planted very close together, and workers often spend extended periods of time working in rows of densely planted tobacco plants, brushing up against leaves.

If the plants have been treated with pesticides, workers may suffer greater exposure to these pesticides than they would while performing agricultural work in other crops treated with pesticides.[\[115\]](#) In addition, jobs where workers directly handle pesticide-treated plants such as topping or harvesting leaves by hand, as in Indonesian tobacco farms, increase exposure, particularly in the absence of effective protective gear and handwashing.[\[116\]](#)

Few of the children interviewed had received any specific education or training about the health risks of tobacco farming. Although many children reported experiencing specific symptoms while working in tobacco farming, most had never heard of acute nicotine poisoning or Green Tobacco Sickness. While many children knew of the dangers of smoking, few understood that nicotine could be absorbed through the skin while handling tobacco leaves. Most children also had not received any education or training regarding the dangers of pesticides and other chemicals or about how to protect themselves from pesticide exposure.

Rina, a 15-year-old girl, and a member of the English club at her school in Sumenep, East Java, told Human Rights Watch she had been working in tobacco farming since elementary school, but she had never heard of acute nicotine poisoning. When Human Rights Watch explained some of the causes and symptoms of the poisoning, she said I never heard about the tobacco leaf containing nicotine. Smoking is the cause of disease. For me, the tobacco leaves on the plant arent dangerous at all. Its when they become cigarettes that theyre dangerous. Touching the tobacco leaves isnt dangerous at all.[\[117\]](#) Dennys, also 15, started working on his fathers tobacco farm in Jember, East Java, at age 11. When Human Rights Watch asked him whether he had been trained about acute nicotine poisoning, he said, My father hasnt told me anything about nicotine. I know it is in cigarettes. I didnt know it was in the plants.[\[118\]](#)

Fifteen-year-old Rara, a ninth grade student, works with her parents as a hired laborer on tobacco farms in Jember, East Java. When asked whether she had been trained by her employers about the health risks of tobacco farming, she said, The owner of the fields doesnt say anything about nicotine, but he says we should be sure not to break any leaves, indicating her employer advised her to be careful not to decrease the value of the leaf, but did not tell her how to protect herself while working.[\[119\]](#)

Some children had a very basic understanding that pesticides could be dangerous, but most said that they had not received any education or training about how to protect themselves from pesticide exposure. Most parents also had very limited understanding of pesticide exposure or the special vulnerability of children to harm from pesticides. Some interviewees thought pesticides were not harmful to humans, or were only harmful if they were ingested. Few people interviewed for this report had a comprehensive understanding of the health risks of pesticide exposure, the ways pesticides enter the human body, and how to prevent exposure.

For example, Matius, a 17-year-old worker in Pamekasan, East Java, and the oldest of three boys in his family, said he did not wear any protective equipment while applying pesticides to tobacco plants on his familys farm. There are no special clothes for spraying the tobacco leaves. I dont wear a mask because Im used to it, and its not necessary. If you drink it, it would be dangerous, but it wont harm you as long as you dont drink it.[\[120\]](#)

Daksa, 15, said he works in tobacco farming for his father and three other farmers in his Probolinggo, East Java, village. He described how in 2015 he applied pesticides to a farm owned by someone else: The owner mixes the liquid with water and puts it in a tank and I apply it, spraying it on the leaves. I do it twice a week. It takes about one-and-a-half hours. The smell stings like a chemical. Daksa said he did not wear gloves or a mask while applying the chemicals, and when asked what the owner of the farm had taught him about pesticides, he said the owner had given him only very basic information: He says it will hurt if I drink it or if I get it in my eyes.[\[121\]](#)

Fifteen-year-old Rina, who worked on tobacco farms in Sumenep, East Java, in 2015, explained, When I was a kid, no one told me about the chemicals. But when I went to junior high school, I learned physics and chemistry. I learned its dangerous. But its dangerous to plants, not to humans.[\[122\]](#)

Many children interviewed for this report described working in high heat on tobacco farms. Some children we interviewed fainted, and attributed their fainting to the heat. Others said that they felt faint or dizzy or suffered headaches when working in very high temperatures. Working in extreme heat can place children at risk of heat stroke and dehydration, particularly if they do not drink enough water. Children are more susceptible than adults to heat illness.[\[123\]](#)

A few children said they fainted while working on extremely hot days. For example, Musa, a 16-year-old boy with spiked hair who worked on tobacco farms in Garut, West Java, in 2015, said he fainted while harvesting tobacco on a hot day:

I fainted in the harvest. I fell down [passed out] because it was too sunny out. I cant handle the smell of the leaves when Im harvesting. I didnt have breakfast that day. I forgot. Its a busy time during the harvest. I just felt that my head had become cold, and I couldnt see clearly. I dont know what happened after that. It wasnt very long. I was out for 20 minutes I think. My parents found me. My dad carried me home.[\[124\]](#)

Agustina, also 16, worked on tobacco farms in 2015 in the same Garut, West Java, village. He told a similar story:

Aini, a 15-year-old girl who works on tobacco farms in Sampang, East Java, told Human Rights Watch she collapsed while watering tobacco with heavy buckets in the early part of the growing season. When I was watering, I fell down. I was lucky because my uncle and my neighbors were behind me. They caught me right away. I was too tired, and its so hot in the fields, and my heart was so heavy, and I couldnt think. They took me under a tree I felt terrible. It was like I was seeing shadows. My neighbors put some oil under my nose to wake me up.[\[126\]](#)

Many other children interviewed by Human Rights Watch reported experiencing dizziness, lightheadedness, and headaches while working in extreme heat. The experience of Suci, a 14-year-old girl in Sampang, East Java, who started working in tobacco farming at age 11, was typical among the children interviewed by Human Rights Watch: Quite often in the morning I feel dizzy when I have to water the plants because its hot and the buckets are heavy. It feels like things are spinning around.[\[127\]](#) When asked how he felt while working on hot days, William, a 16-year-old worker also in Sampang, East Java, said, Sometimes I get

headaches. The worst is when you feel lightheaded. Its like I see black.[\[128\]](#)

Beyond the symptoms associated with exposure to nicotine, pesticides, and heat, as described above, some children interviewed for this report suffered respiratory symptoms, skin conditions, or irritation of their eyes while working in tobacco farming.

Some children interviewed by Human Rights Watch described respiratory and allergic symptoms when working in tobacco farming, including coughing, sneezing, difficulty breathing, tightness of the chest, and itching, burning, or tightness of the throat. Children reported these symptoms while working with both green tobacco and dried tobacco. Public health studies have found that workers involved in tobacco production suffer respiratory symptoms. A 2011 study on the prevalence of respiratory and allergic symptoms among non-smoking farmworkers in eastern North Carolina in the United States found nearly one-quarter reported wheezing at times, with elevated odds of wheezing for individuals working in tobacco production.[\[129\]](#) 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.[\[130\]](#)

Some children said they experienced respiratory symptoms while working with green tobacco. For example, Rusanti, a 16-year-old boy who worked on tobacco farms in Probolinggo, East Java, in 2015, described difficulty breathing and tightness in his chest when working near green tobacco: When its harvest season, because there are tobacco leaves everywhere, its hard to breathe. It feels like someone is pushing on my chest.[\[131\]](#) Similarly, Paul, a 17-year-old boy from Temanggung, Central Java, attended boarding school in the city, and traveled home to his village on his summer break from school in 2014 to help his family on the tobacco farm. He told Human Rights Watch, In my throat, if I just pass by the tobacco leaves, my throat feels tight. Its hard to breathe. Sometimes I cough and sneeze.[\[132\]](#)

Its hard to breathe, said Argo, a 15-year-old boy in Pamekasan, East Java, who has been working on his familys tobacco farm since elementary school. The tobacco makes your chest feel tight. Its difficult, especially during the harvest because the smell is so strong. He explained how he feels when cutting harvested tobacco leaves before setting them out in the sun to dry: I cough when I cut the tobacco because when you cut [the leaves] the really bad smell comes up. It releases the smell from the leaf. It feels like something is blocking your throat.[\[133\]](#)

Fourteen-year-old Seto, an eighth grade student and member of the school choir, worked in tobacco farming in Sampang, East Java, in 2014. He described how he felt while stacking and bundling harvested tobacco leaves: I sneeze when Im wrapping. Its itchy in my throat and makes me cough.[\[134\]](#)

Murni, an 11-year-old worker, also told Human Rights Watch that she suffered respiratory symptoms while handling wet tobacco leaves at a curing barn in East Lombok, West Nusa Tenggara, in 2014. Im sneezing when Im around the wet tobacco. The smell is like wet. It makes me sneeze.[\[135\]](#) Diana, also 11, worked at the same East Lombok curing barn and had a similar reaction to the wet tobacco: I sneeze because when I untie the leaves, its smelly. Its a strong smell. And the leaves are still wet when they just arrived from the field. When I open the bundle, the tobacco is wet and the smell comes out. I try to stay away from it. Sometimes its hard to breathe because the smell is so strong.[\[136\]](#)

Other children reported respiratory and allergic symptoms while working with dried tobacco. Yuda, a 15-year-old boy, worked at a tobacco curing barn in East Lombok, West Nusa Tenggara, in 2014. He sorted dried tobacco leaves and used a machine to compress them into bales. He told Human Rights Watch, After drying, the smell is strong Im always sneezing when Im near the dry tobacco. Its common with dry tobacco because its smelly.[\[137\]](#)

Joandi, age 12, helped his parents dry their tobacco in the sun in Probolinggo, East Java, in 2014. He told Human Rights Watch how he felt while carrying thin bamboo boards of dried tobacco around the village: Sometimes I start coughing when Im carrying the bamboo because its smelly. The smell is strong when its drying.[\[138\]](#) Dried tobacco has a lot of dust, explained Dumadi, a 12-year-old worker in Garut, West Java. I get a cough when Im around it, so I cover my face so I dont breathe in the smell. Its too smelly. It feels itchy in my nose.[\[139\]](#)

Twelve-year-old Puja, who worked on tobacco farms in her community in Probolinggo, East Java, in 2014, told Human Rights Watch, I cough when Im around the dried tobacco because the smell is bad. Mira, age 14, works with Puja and described similar feelings when working with dried tobacco: I feel like I have a cold. And I sneeze.[\[140\]](#)

Leah, a 14-year-old worker in Garut, West Java, reported similar symptoms: Sometimes I feel so bad with a cough because the dust from the leaf is so bad in my nose. It hurts. Its like burning in my throat.[\[141\]](#)

Some children interviewed reported that their skin would itch, sting, or burn after handling tobacco. Some children also said they got small cuts or blisters from the work.

Arto, age 8, said his skin itched and burned while he bundled tobacco leaves in Probolinggo, East Java, in 2014. I get a rash, he said. It burns my skin The tar on the leaves makes my hands itchy.[\[142\]](#) Sixteen-year-old Hawa has been working on tobacco farms in her village in Sampang, East Java, since she was 10. She described how her skin felt when she handled green tobacco leaves in 2014 during the harvest: When I take off the leaves, from the beginning, my skin feels itchy. But you have to work fast. If you slow down and start scratching, it itches more. The tobacco leaf makes you itch.[\[143\]](#) Utama, a 17-year-old worker in Probolinggo, East Java, also said bundling tobacco leaves in 2014 irritated her skin: The leaf has liquid, the liquid gets on my hands, and my hands get itchy. And I feel itchy on my face.[\[144\]](#)

Agung, age 9, wore a Superman shirt while he was interviewed by Human Rights Watch about his experience working on tobacco farms in 2014 in East Lombok, West Nusa Tenggara. He said, I start feeling itchy when Im around the dried tobacco.[\[145\]](#)

Some children also reported small cuts and blisters from working in tobacco farming. Utari, a 13-year-old girl in Probolinggo, East Java, who started working in tobacco farming at age 10, told Human Rights Watch, My skin hurts from the leaves. My hands get little cuts.[\[146\]](#)

Rio, age 13, planted tobacco on farms in his village in Magelang, Central Java, in 2014, digging small holes in the soil with his bare hands: Because I have to make a hole in the hard soil, it hurts my hand. It gives me water inside my skin, he said, describing painful blisters he develops while working.[\[147\]](#) Ismaya, also 13, worked with Rio in 2014 and used a piece of wood to dig holes during planting season. Because the wood is rough, I get splinters and little cuts in my skin, he told Human Rights Watch.[\[148\]](#)

Human Rights Watch could not determine the causes of the skin irritations reported by child tobacco workers in Indonesia, but public health research has found a high prevalence of skin conditions among agricultural workers in the United States.[\[149\]](#) A 2007 study suggests tobacco workers may be particularly susceptible to skin conditions as both the tobacco leaf itself and pesticides used in tobacco cultivation are possible causes of contact dermatitis, an inflammatory skin disease.[\[150\]](#)

A few children reported irritation of their eyes while working in tobacco production with both green and dried leaves. Eight-year-old Lara wrapped harvested tobacco leaves into bundles by hand in Probolinggo, East Java, in 2014. She told Human Rights Watch that liquid from the tobacco leaves would splash into her eyes while she worked, causing pain and irritation: If the tobacco water gets in my eyes, it stings. It feels really hot in my eyes. The leaf has a bone [stem], and when you break it, it has liquid in it. If its fresh, and I touch my eyes, it burns.[\[151\]](#) Budi, a 16-year-old worker in Magelang, Central Java, told Human Rights Watch that harvesting tobacco in 2014 irritated his eyes: Theres a lot of dust. It burns my eyes, he said.[\[152\]](#)

Most children interviewed by Human Rights Watch said they did not use tools for tobacco cultivation, but some children reported using sharp hoes, scythes, or knives to dig in fields, uproot weeds, harvest tobacco, or cut harvested tobacco leaves for drying. Some children sustained injuries when they cut themselves with hoes or knives, or pricked their hands or fingers with sharp bamboo while tying tobacco leaves.

Several children reported cutting themselves while digging in fields with sharp hoes. Fourteen-year-old Angga is the oldest of three boys in his family, and has been working on tobacco farms in Jember, East Java, since he was 10. He showed Human Rights Watch a fresh wound he sustained while working barefoot in June 2015: I use a hoe when I dig. I cut my foot two days ago. It bled, but I washed it with water, put on a bandage, and went back to work. When asked if he had cut himself before, he said, Yes, maybe five times. This cut was the worst.[\[153\]](#)

Agus, a 17-year-old worker in Magelang, Central Java, said he used a hoe to make rows in the tobacco fields before planting in 2014. He told Human Rights Watch, I cut myself with the hoe. I was digging and it slipped and hit my leg. I only have a small scar, but it was bleeding.[\[154\]](#)

Henry, a 16-year-old worker in Sampang, East Java, injured himself with a hoe while working barefoot in 2013. He described the incident: Two years ago, I was starting to learn how to dig the land. I was just digging the land, and its hard, and I just slipped with the hoe and it hurt my toe. It was bleeding. I didnt go to the doctor. I just wrapped it. I wasnt wearing shoes.[\[155\]](#)

Some children also sustained injuries while working with knives at other stages of the tobacco season. Sixteen-year-old Eddi, who worked in tobacco farming in Magelang, Central Java, in 2014, said, I use a knife to cut down the tobacco stalks after the harvest. I get cuts on my hands after the harvest when I use the knife.[\[156\]](#)

Guntur, 15, worked alongside his parents, who are hired laborers, on tobacco farms in Jember, East Java, in 2015. Unlike most workers interviewed for this report who used their hands to harvest tobacco leaves, Guntur used a knife during the harvest. When I hold the leaves where the knife is going, I cut my fingers, he said. Though he had only suffered minor cuts, he said he knew a boy who had sustained a more serious injury while harvesting with a knife. I just get small scratches, but my friend was bleeding a lot, he said.[\[157\]](#)

When Human Rights Watch interviewed 15-year-old Labuh in Sumenep, East Java, in 2015, he described how he helped to cut harvested tobacco with a long, sharp knife before spreading it in the sun to dry. We pick leaves, roll them, cut them into pieces, and spread them out to dry. We use sharp steel to cut [the tobacco]. He added, I havent hurt myself. Your hands are not close to the blade. But I know someone else who cut off their finger.[\[158\]](#)

In some East Java communities where Human Rights Watch conducted research, children pierced tobacco leaves with sharp bamboo stakes during the curing process, and many of them said their pricked their hands or fingers. Among these children, the experience of 11-year-old Ratih in Jember, East Java, was typical: When I string one leaf after another, I cut my finger because the leaves are covering the bamboo [stake]. I missed and hit my hand [with the stake] and it was bleeding. It was the tip of my finger. It was painful. It was stinging.[\[159\]](#)

A few boys interviewed in East Lombok, West Nusa Tenggara, said they climbed onto bamboo beams high in curing barns to hang sticks of tobacco leaves to dry. These children worked at heights of more than three meters with no protection from falls. Omar, a 19-year-old tobacco worker who started working in tobacco farming when he was 15, explained that he had fallen more than once while working in curing barns. Ive fallen in the barn. When I climbed to the second bamboo in the middle, the bamboo suddenly broke, and I fell. Nothing happened. Just my hands got a scar. I fell [again] this season, a few weeks ago. When asked if he had seen other people fall, he said Some people fell. No one was seriously hurt.[\[160\]](#)

Riko, 15, lives with his aunt and uncle because his parents went to Malaysia to work. He works on his uncles East Lombok tobacco farm, and said he only climbed up high in the barn once. He explained how he straddled two bamboo beams, and held another beam for balance. I dont want to do it again, he said. Its so frightening because I feel like I will fall every time.[\[161\]](#)

Fourteen-year-old Andre, explained how he climbed onto a bamboo beam high in the barn, and passed sticks of harvested tobacco leaves to workers above him: Sometimes I climb to put the tobacco in the barn. It needs three to four people from the bottom to the top. I pass it on to the next person. When asked if people fall, he answered, Rarely.[\[162\]](#)

A few children also said they fell while reaching above their heads to remove sticks of dried tobacco leaves from curing barns. Ten-year-old Hani worked with her older sister and her cousin at curing barns in East Lombok, West Nusa Tenggara, in 2014. Her job was to unload sticks of dried tobacco from the barn, and sort the leaves into piles according to color. She told Human Rights Watch that she fell in 2014 when she was trying to reach for a stick hanging in the barn: I fell down because I couldnt reach the leaves. They were high up. It hurt. I fell on my leg.[\[163\]](#) Diana, an 11-year-old girl working at the same barns, had a similar experience in 2014: Because the oven is so tall, the tobacco is hanging up high. And when I reached up for it, I slipped and fell.[\[164\]](#)

Child tobacco workers in all four of the provinces where Human Rights Watch carried out research reported engaging in repetitive motions for extended periods of time, including working bent at the waist or hunched over while tilling soil, planting, watering, weeding, or harvesting; reaching above their heads to remove flowers and leaves from tobacco plants, or load and unload tobacco from curing barns; twisting their hands and wrists to bundle and tie tobacco leaves; and squatting, kneeling, or sitting in uncomfortable positions while bundling and sorting tobacco leaves. Children reported pain and soreness in their backs, necks, shoulders, hips, arms, wrists, hands, legs, and feet from the work.

Many children said they suffered pain and stiffness in their hands and wrists from folding and pressing stacks of green tobacco leaves into bundles before curing. Muthia, an 11-year-old girl in Probolinggo, East Java, sat in a dim room in her fathers home as she described wrapping harvested tobacco for her father and the neighbors in 2014. She said, The hardest part is pressing the leaves into bundles. Its hard because the tobacco leaf has a bone [stem], and I have to press hard on it so the bundle doesnt come undone. It hurts my wrists. I have pain from it.[\[165\]](#) Utari, 13, also wrapped tobacco leaves into bundles in the same village in 2014. Describing how she felt while doing the work, she said, I just feel weak. And because I do it over and over again, I have pain in my arms, and my wrists.[\[166\]](#)

Several children reported pain while digging soil with hoes or weeding in tobacco fields. Digging the fields is the hardest, said 15-year-old Samuel, who has been working on tobacco farms in his Garut, West Java, village for many years. It hurts my back because I have to hunch over and stand up over and over again.[\[167\]](#) Sharon, a 14-year-old from the same village who wore a red scarf and purple-rimmed glasses, said she suffered back pain while weeding in tobacco fields: I feel tired in my muscles, [especially] in my back because I have to bend over so many times. It hurts She explained, Pulling up weeds is the hardest. We have to do it so many times because the weeds grow fast. Its the hardest day. My back is always in so much pain. All of my body feels it.[\[168\]](#)

Some children also described pain and soreness from extending their arms repeatedly while reaching up to top tobacco plants or harvest leaves. Wani, a 16-year-old girl who worked in Sampang, East Java, in 2014, told Human Rights Watch, The tobacco is taller than me, and I have to reach over my head. The hard part is taking off the flower because the plants are taller than me. It hurts in my arms.[\[169\]](#)

Thirteen-year-old Sinta said her neck got sore while harvesting tobacco on farms in her village in Magelang, Central Java, in 2014: I have to reach up high to get the leaves, and it hurts my neck.[\[170\]](#) Joandi, a 12-year-old worker in Probolinggo, East Java, also suffered pain while harvesting in 2014: If Im collecting the leaves, my back hurts. Its exhausting. I get pain in my shoulders from reaching for the leaves.[\[171\]](#)

Human Rights Watch observed Sella, 12, working outside a curing barn in East Lombok, West Nusa Tenggara, in 2015. She described spending hours sitting, squatting, or kneeling on the ground near the barn and twisting her hands and wrists to tie tobacco leaves to bamboo sticks. When asked if she suffered pain, she said, In my hands, in my hips, and my feet. Its like tense. When I get home it still feels sore.[\[172\]](#)

Children interviewed by Human Rights Watch often reported carrying heavy loads in their arms, or on their backs or heads, including buckets filled with water or fertilizer, tanks filled with chemicals, and large sacks of tobacco leaves. Some children also lifted heavy sticks of harvested tobacco leaves above their heads to load them into curing barns. Almost all children suffered pain and fatigue from this difficult work.

Many children described spending hours drawing water from wells and carrying heavy buckets of water through tobacco fields in the early part of the growing season. Most farms lacked any irrigation technology, and workers said they watered plants by hand daily, or twice a day, to keep them alive for the first month after planting. It was common for children interviewed by Human Rights Watch to describe watering as the most difficult work of the tobacco season.

Most children carried two buckets, one in each hand, often attached to a yoke, a wooden frame worn across the shoulders. The children estimated that each bucket held several liters of water. For example, Rusanti, a tall 16-year-old boy in Probolinggo, East Java, said he watered his fathers tobacco farm every day for a month in 2015. I carry two buckets with some wood across my shoulders, he said. When its the first week, I have a lot of pain. You can feel it when you sleep at night.[\[173\]](#)

Fifteen-year-old Aini had a similar experience watering tobacco farms in her Sampang, East Java, community in 2015: My body is in pain all day because I have to go back to the well for the water, and its heavy.[\[174\]](#) Natalia, a shy 13-year-old girl with side-swept bangs, lives with her grandmother in East Lombok, West Nusa

Tenggara. She told Human Rights Watch she carried a heavy bucket on her head while applying fertilizer to her grandmothers farm in 2015: I bring the bucket filled with water mixed with fertilizer [to the field]. I bring it on my head, and then I put it on the ground, and I use a cup to take the water, and I put it in the soil. Giving fertilizer is the hardest part because you have to carry the bucket. It hurts in my head and in my back. It feels very tense.[\[175\]](#)

Some children also reported carrying large sacks of harvested tobacco leaves in their arms or on their heads to transport them from fields to curing areas.

Musa, a 16-year-old boy in his second year of junior high school, told Human Rights Watch he and two friends carried large sacks of harvested tobacco from farms in his Garut, West Java, village in 2014: I carry tobacco leaves after the harvest. We put all the leaves in the sack, and carry it with our hands its heavy. When Im working my muscles feel fine, but when I go to sleep, the pain starts coming in. I get pain in my back and my legs.[\[176\]](#)

Vanessa, a soft-spoken 14-year-old girl in Sampang, East Java, said she harvested tobacco on farms in her village in 2014 and carried bags of tobacco leaves on her head from the farms to the center of village. She told Human Rights Watch, Carrying the tobacco is the hardest work. Sometimes I get a headache with the heavy weight on my head, and I see stars. I feel lightheaded.[\[177\]](#)

Fifteen-year-old Guntur said he performed similar work in his Jember, East Java, village in 2014: When the harvest comes, I put leaves on the ground, and after that, I pick up all the leaves, put them in the sack, and carry them to the bike or the car. I put it on my back. Its heavy. Its painful. I get pain in my muscles. He said he carried the sacks from a field to a home in his village: Sometimes its more than 10 minutes walking.[\[178\]](#)

Budi, 16, and Agus, 17, harvested tobacco together on farms in their village in Magelang, Central Java, in 2014. The boys told Human Rights Watch they carried large bags of tobacco leaves from fields to the village. My muscles get sore when Im doing the work over and over, said Budi. I get pain in my back and my legs. Its because I take off the leaves and carry them in my arms and on my head, added Agus.[\[179\]](#)

Some children said they experienced pain and soreness from carrying heavy tanks on their backs while applying pesticides to tobacco arms. The hardest part is spraying [pesticides] because its heavy, said Randi, who applied pesticides to his familys East Lombok, West Nusa Tenggara, tobacco farm in 2015. I get tense muscles in my back.[\[180\]](#)

A few boys interviewed in West Nusa Tenggara also carried heavy sticks of harvested tobacco leaves to curing barns and lifted them above their heads to load them into curing barns. Fifteen-year-old Riko, who worked on tobacco farms in East Lombok, West Nusa Tenggara, in 2015, said, The hardest part is to load the tobacco in the barn because when I have to load it, it is heavy. My muscles feel tense. It hurts in my shoulders.[\[181\]](#)

Engaging in repetitive motions and carrying heavy loads can lead to musculoskeletal disorders, defined by the United States Centers for Disease Control and Prevention as, injuries or disorders of the muscles, nerves, tendons, joints, cartilage, an disorders of the nerves, tendons, muscles and supporting structures of the upper and lower limbs, neck, and lower back that are caused, precipitated or exacerbated by sudden exertion or prolonged exposure to physical factors such as repetition, force, vibration, or awkward posture.[\[182\]](#)

The ILO considers musculoskeletal disorders arising from repetitive work, working in unsuitable positions, carrying heavy loads among the major occupational and work-related diseases affecting agricultural workers worldwide.[\[183\]](#) A 2010 review of musculoskeletal disorders in agricultural work cites three main risk factors for such injuries: lifting and carrying heavy loads, sustained or repeated full body bending, and very highly repetitive hand work.[\[184\]](#)

Children may be especially vulnerable to musculoskeletal disorders because their bodies are still developing.[\[185\]](#) The impacts of repetitive strain injuries may be long-lasting and result in long-term health consequences including chronic pain and arthritis.[\[186\]](#)

Most children interviewed for this report attended school and worked in tobacco farming primarily, or exclusively, outside of school hours. Some of these children worked before and after school, while others worked only on weekends and school holidays.

For example, 16-year-old Hawa, who started working on her fathers tobacco farm in Sampang, East Java, when she was 10, was in her last year of junior high school when she was interviewed by Human Rights Watch in 2014. She said, During the school days, I work after school [from 1 p.m.] until 5 p.m. When schools out, I work from 6 a.m. to 12 p.m., take a break at home, then go back to the fields at 1 p.m., and work until 5 p.m. She said she worked six days a week for the duration of the season: I take Fridays off. I start working in May, and I finish in harvest time [around September].[\[187\]](#)

Budi, also 16, described working similar hours on the farms in his village in the mountains of Magelang, Central Java: Because I go to school every day, I cant start working until 1 or 2 p.m., so I just work for a few hours. But on Sunday, I can work full days. Because its really cold here, I start at 8 a.m., go home at 12 p.m., break until 1 p.m., and then I work until evening, at least until 4 p.m.[\[188\]](#)

Other children interviewed had left school before reaching the compulsory age for schooling and regularly worked longer hours in tobacco farming. Peni, a 13-year-old girl who started working in tobacco farming in Magelang, Central Java, at age 12, left school after second grade to help her parents on their farm. She said, I work for my parents and also my neighbors I start at 7 a.m. and work until 12 p.m., and then [after lunch] I go back to the field until 4 p.m. I work every day, including Sunday.[\[189\]](#)

Childrens working hours often varied considerably based on their school schedules and the stage of the tobacco growing season. Many children said they worked every day during certain parts of the season, and only a few days a week at other stages. For example, Leah, a 14-year-old girl who worked with her two older siblings on her mothers tobacco farm in Garut, West Java, in 2015, explained that her work schedule varied throughout the season: In the high season, I go to the field every day. But now [in the early part of the season] its just two times a week. She said that early in the season, she worked shorter hours than she did during the harvest: When harvest season comes, I work starting at 1 p.m. until late at night.[\[190\]](#)

Though most children did not describe working excessively long hours in tobacco farming, some children said they worked 10 or more hours a day during the harvest season. Yulia, age 13, worked with her younger sister and her cousin at several curing barns in her community in East Lombok, West Nusa Tenggara, in 2014. Sitting on the floor in her brown school uniform, she described how she tied and untied tobacco leaves from bamboo sticks and sorted them into piles for hours on end. On holidays [from school], I start at 7 a.m. and work until 4 or 6 p.m. because theres a lot of leaves In the high season, I work until 8:30 at night. She described pain and fatigue after working long hours: Oh god, I get so tired. Your body hurts all over. Its painful.[\[191\]](#)

Seventeen-year-old Paul, who helps his parents on their tobacco farm in Temanggung, Central Java, when he is home from boarding school, said he had worked all through the night in the 2014 harvest season: My parents and neighbors work from morning until morning again because its high season. Ive worked all night with them. There were too many leaves, so I had to work until night. After praying time in the morning [at dawn], I slept. I worked all night until morning.[\[192\]](#)

Some children reported working in the dark, either early in the morning before sunrise, or late at night. Fifteen-year-old Irene told Human Rights Watch she woke up very early to work on her fathers Pamekasan, East Java, tobacco farm in 2015 before going school: If I go to school, I start watering at 2 a.m. until 3:30 or 4 a.m. because Im afraid Ill be late for school. Its dark outside. My parents and I take a torch. I go with my parents or my brothers. Its quite far from my house because the field is in the mountains. It takes 30 minutes to walk there. I arrive home at 4:30 a.m., then cook breakfast and leave for school at 6 a.m. If I have to walk [to school], it takes one hour, so I have to go early.[\[193\]](#)

Both adults and children in all four provinces where Human Rights Watch conducted research consistently described taking frequent breaks throughout the workday to pray, take meals, or avoid excessive heat and sun exposure. Almost no children said they felt pressured to work quickly without taking sufficient breaks.

Most children interviewed for this report said they attended school and worked in tobacco farming only outside of school hours before and after school, and on weekends and school holidays. However, Human Rights Watch found that work in tobacco farming interfered with schooling for some children.

The United Nations Childrens Funds (UNICEF) Indonesia Office states that while most children in Indonesia complete primary education, a significant number of children stop their education after completing primary level.[\[194\]](#) Data from the United Nations Educational, Scientific and Cultural Organization (UNESCO)

indicate that school enrollment rates decline substantially between primary school and secondary school. UNESCO data shows more than 3.8 million children under 18 were not enrolled in primary or secondary education in 2013.^[195]

A few children interviewed for this report had dropped out of school before turning 15 the compulsory age for schooling in Indonesia in order to work to help support their families.^[196] These children often said their families could not afford to put them through school, or relied on them to work.

Even though interviewees in most communities said they did not have to pay school fees to attend public schools, the costs of books, uniforms, and transportation to and from school were prohibitive for some families. For example, Utama, a 17-year-old girl in Probolinggo, East Java, who started working in tobacco farming when she was in fourth grade, dropped out of school to work: I finished my elementary school and then I stopped going to school. I can't afford it. I'd rather be in school, but I'm working because I want to make money for my family, for the food. She told Human Rights Watch that since she left school, she had to adjust her hopes for the future: I used to want to be a teacher, but you know I can't do that. Now I want to work in a store.^[197]

Sari, a bright-eyed, 14-year-old girl in Magelang, Central Java, told Human Rights Watch she dreamed of becoming a nurse, but she stopped attending school after sixth grade in order to help support her family. I want to go back to school to achieve my dreams for the future, but we don't have much money to do that.^[198]

Human Rights Watch interviewed 14-year-old Andre in 2015 while he prepared to load tobacco into a curing barn in East Lombok, West Nusa Tenggara. He worked alongside his father, a hired laborer, on tobacco farms in his village. I stopped going to school because I always missed school because I had to go to work. I stopped a long time ago, like two years ago, he explained. Because I stopped when I was in fifth grade, I don't think I can continue in school now, Andre said.^[199]

Some children said they missed some days of school during busy times of the growing season. Raden, a 14-year-old worker interviewed in 2015 in Sumenep, East Java, said, Last season, I skipped two days because there were so many [tobacco] leaves to finish. I feel sad to miss school. I asked my friends if there was homework or anything I could do to make up what I missed in school.^[200] Eleven-year-old Rojo, the oldest child in his family, said he missed school to work in tobacco farming three or four times during the 2014 harvest season in Sampang, East Java: My dad asked me to go to the field earlier, and not go to school, he said. I was worried I wouldn't pass the exams.^[201]

Human Rights Watch interviewed Dumadi, 12, in his family's one-room home in Garut, West Java, in 2015. He said he started working on his father's tobacco farm at age 8, and often missed school during the harvest season: Of course I had to skip school. More than three times. My dad asked me not to go to school because it was the busy time. When asked how his teacher responded to him missing classes, he said it was common for children to miss school during the high season: Here in this village, if you miss school, even for a week, they don't ask about it.^[202]

Some children interviewed said they found it difficult to combine school and work, and described fatigue and exhaustion or difficulty keeping up with schoolwork. Awan, a slender 15-year-old boy from Pamekasan, East Java, described how he balanced school and work during the high season: When the harvest is coming, I have to wake up early in the morning, and I have to be [work] in the fields until 6:30 a.m., then go to school, and then continue in the fields in the afternoon. We go [to the fields] around 4:30 or 5 a.m. It's still dark, but I use a headlamp. I feel like I want to sleep longer. It's tiring. He told Human Rights Watch that this grueling schedule made it difficult for him to keep up with his schoolwork: It's harder to study than it is before the harvest, he said. It makes me so tired.^[203] Sixteen-year-old Musa, a junior high school student who worked on tobacco farms in 2015 in Garut, West Java, described a similar schedule: After getting home from school, I go directly to the field. He said the only time to do his homework was early in the morning before school: I do my homework after we pray in the mornings.^[204]

Under international law, the Indonesian government has an obligation to ensure that children are protected from the worst forms of child labor. The government of Indonesia has a strong legal and policy framework on child labor, and a number of national programs to address child labor. Indonesia's list of hazardous occupations prohibited for children under 18 includes work with harmful chemical substances, but does not explicitly ban children from handling tobacco. Human Rights Watch believes that any work involving direct contact with tobacco in any form constitutes work with harmful chemical substances, and should be considered prohibited for all children under international and national laws and regulations. In addition, enforcement efforts are weak in the small-scale agricultural sector and inadequate to detect and eliminate hazardous child labor more broadly.

Indonesia has ratified international conventions concerning child labor, including the International Labour Organization (ILO) Worst Forms of Child Labour Convention, the ILO Minimum Age Convention, and the United Nations (UN) Convention on the Rights of the Child (CRC).

ILO Convention No. 182 (the Worst Forms of Child Labour Convention) prohibits the worst forms of child labor, including 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).^[205] As a state party to the Worst Forms of Child Labour Convention, Indonesia is obligated to take immediate and effective steps to ascertain what forms and conditions of child labor in agriculture violate the convention and then prohibit and eliminate them.^[206] The Convention obliges member states to take immediate action to prevent children from engaging in the worst forms of child labor; and to provide direct assistance for the removal of children engaged in the worst forms of child labor.^[207]

Although the ILO does not maintain a list of occupations that in its view constitute hazardous work for children, ILO Recommendation No. 190 (the Worst Forms of Child Labour Recommendation) provides guidance to countries on determining what types of work constitute harmful or hazardous work for children. The recommendation states that in defining the worst forms of child labor, consideration should be given, among other things, to:

Each state party to the Worst Forms of Child Labour Convention is required to take this guidance into consideration as part of their efforts to identify specific tasks and occupations that constitute hazardous work for children.^[209]

Indonesia is also a party to ILO Convention No. 138 (the Minimum Age Convention), which sets the basic minimum age for employment at 15, and states that children ages 13 to 15 may participate only in light work that is not likely to be harmful to their health or development or hinder their education.^[210] The Minimum Age Convention also prohibits children under 18 from engaging in hazardous work.^[211]

The Minimum Age Convention specifies that children ages 16 and 17 may be authorized to engage in hazardous work on condition that the health, safety and morals of the young persons concerned are fully protected and that the young persons have received adequate specific instruction or vocational training in the relevant branch of activity.^[212] ILO Recommendation 190 supports the same principle with regard to the Worst Forms of Child Labour Conventions prohibition on hazardous work for children.^[213]

Indonesia has also ratified the Convention on the Rights of the Child (CRC), which provides 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.^[214] Under the convention, governments must take appropriate legislative, administrative, social, and educational measures to protect children from exploitative and hazardous work, including by establishing a minimum age for employment, regulating the hours and conditions of children's work, and providing for appropriate penalties or other sanctions to ensure the effective enforcement of such protections.^[215]

International human rights instruments recognize the right of children to the highest attainable standard of health.^[216] The International Covenant on Economic, Social and Cultural Rights (ICESCR), ratified by Indonesia in 2006, obligates governments to take the steps necessary for the prevention, treatment and control of occupational and other diseases,^[217] and recognizes the right of everyone to the enjoyment of just and favorable conditions of work including safe and healthy working conditions.^[218] 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.^[219]

Governments also have a duty to protect human rights in the context of business activity, including commercial agriculture, through effective regulation.^[220] The UN Guiding Principles on Business and Human Rights state that this requires taking appropriate steps to prevent, investigate and redress such abuse through effective policies, legislation, regulations and adjudication.^[221] Governments also have a duty to effectively enforce that legal and regulatory framework once it is in place, to prevent abuse and ensure accountability and redress for abuses that do occur. Governments should also continually assess whether existing rules and the enforcement of those rules are actually adequate to the task of ensuring respect for human rights, and improve upon them if they are not.^[222]

Indonesia has strong laws and regulations regarding child labor, and these are largely aligned with the international standards outlined above. Under Indonesian law, the general minimum age for employment nationwide is 15.^[223] Children ages 13 to 15 may participate in light work as long as the work does not interfere with their physical, mental, or social development.^[224] Indonesian labor law prohibits hazardous work by everyone under 18.^[225]

A 2003 decree from the Minister of Manpower and Transmigration details the types of work that endanger the health, safety, and morals of children.^[226] The ministerial decree explicitly prohibits a range of activities as hazardous work for children. Human Rights Watch found child tobacco workers in Indonesia engaging in several of those tasks, including:

Though the 2003 decree does not specifically ban children from handling tobacco, Human Rights Watch believes that the government of Indonesia should update its list of hazardous occupations to explicitly prohibit all children under 18 from working in direct contact with tobacco in any form. Nicotine is present in all parts of tobacco plants and leaves at all stages of production.^[228] and public health research has shown that tobacco workers absorb nicotine through their skin while handling tobacco.^[229] Nicotine is a toxin, and nicotine exposure has been associated with lasting adverse consequences on brain development.^[230] The use of protective equipment is insufficient to eliminate the dangers of working with tobacco and may lead to other dangers, such as heat illness.^[231]

In 2014, Indonesia adopted the Roadmap for the Acceleration of Making Indonesia Free of Child Labor by 2022, the third phase of the governments National Plan of Action on the Elimination of the Worst Forms of Child Labor (2002-2022), which sets ambitious goals for eradicating hazardous child labor by 2022. According to the US Department of Labor, the roadmap focuses on mainstreaming the elimination of child labor into broader national policies.^[232]

The government has also implemented a number of social programs aimed at addressing child labor, including programs to: withdraw child laborers from hazardous work, provide direct monetary assistance to poor families, compensate schools for lost income when waiving school fees and remove barriers to education for poor and vulnerable children, and other measures.^[233]

A number of government bodies carry out activities related to eliminating child labor, including the Ministry of Manpower and Transmigration, which monitors and enforces child labor laws and works with law enforcement to prosecute violations; the Ministry of Women's Empowerment and Child Protection, which receives complaints regarding child labor and develops child protection policies; and the National Commission on Child Protection, which provides information regarding child labor and monitors national efforts to respond to child labor violations.^[234] The Ministry of Health, the Ministry of Culture and Education, and the Ministry of Social Affairs also work to address child labor by focusing on issues related to the health, education, and protection of children.^[235]

The Ministry of Manpower and Transmigration is the agency responsible for the enforcement of child labor laws and regulations. The ministry has about 2,000 inspectors carrying out labor inspections nationwide, far too few for effective labor enforcement in a country of more than 250 million people.^[236]

In an interview with Human Rights Watch, a ministry representative explained that child labor is part of any labor inspection, and the ministry typically carries out more than 100,000 workplace inspections each year. However, these inspections take place only in formal labor sectors and large-scale agro-industry, and are not carried out in the informal, or small-scale agricultural sector.^[237] As explained above, the vast majority of children interviewed for this report worked in small-scale farming.

While Indonesia has a strong legal and policy framework and has implemented a number of social programs to address child labor, existing laws and regulations do not specifically restrict childrens work handling tobacco, despite the dangers of nicotine exposure.

Based on the findings documented in this report, and our analysis of international standards and public health literature, and interviews with experts on farmworker health, Human Rights Watch believes that any work involving direct contact with tobacco in any form should be considered hazardous and prohibited for children under 18, due to the health risks posed by nicotine, and the particular vulnerability of children whose bodies and brains are still developing.

There may be some light work on tobacco farms that is suitable for children, particularly in the early stages of tobacco production. For example, planting tobacco while wearing suitable gloves or watering tobacco plants with small, lightweight buckets or jugs could be acceptable tasks for children, as long as they are not working in extreme heat or dangerous conditions, and the work does not interfere with their schooling. However, Human Rights Watch believes that many aspects of tobacco farming in Indonesia constitute hazardous child labor under international standards, particularly most tasks involved in harvesting and curing of tobacco, as there is no viable way to limit childrens direct contact with tobacco during these stages of production.

Though protective equipment may help mitigate the absorption of nicotine and pesticide residues through the skin, rain suits and watertight gloves would not completely eliminate exposure to these toxins and would greatly increase childrens risk of suffering heat-related illnesses.^[238] In an interview with Human Rights Watch, Dr. Thomas Arcury of Wake Forest School of Medicine explained, We know that [it] decreases your risk for nicotine poisoning if you wear a rain suit. At the same time, you are working in 90-degree [Fahrenheit] temperatures in a rubber suit, so then you have to be really concerned about heat stress and dehydration.^[239]

While masks and gloves could limit childrens contact with tobacco when classifying and sorting leaves in preparation for curing, such protective measures could not completely eliminate exposure to nicotine. During sorting, children typically have sustained contact with tobacco leaves, often with many parts of their bodies, and inhale tobacco dust and fumes for prolonged periods of time. As a result, Human Rights Watch believes that the use of protective equipment is insufficient to eliminate the dangers of working with tobacco during the curing process.

While the Indonesian governments hazardous work list prohibits children from work in environments with harmful chemical substances, it does not specifically restrict children from handling tobacco, despite the dangers of nicotine exposure. This ambiguity leaves children vulnerable.

As part of its efforts to eradicate the worst forms of child labor by 2022, the government of Indonesia should adopt a clear, protective standard prohibiting children under 18 from all but a few light tasks at the early parts of the tobacco growing season. That policy must be easily understood by farmers and effectively monitored and enforced by labor inspectors. An explicit policy specifically framed to address tobacco cultivation is the only viable way to achieve this. The government of Indonesia should update its list of hazardous occupations to explicitly prohibit all children under 18 from working in direct contact with tobacco in any form, and vigorously investigate for child labor and other violations in small-scale agriculture.

In addition, Indonesian authorities should take steps immediately to protect child tobacco workers from imminent danger. The government should implement an extensive public education and training program in tobacco farming communities to promote awareness of the health risks to children of work in tobacco farming, particularly the risks of exposure to nicotine and pesticides.

Detailed recommendations to the government of Indonesia are included at the end of this report.

While governments have 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. The United Nations (UN) Guiding Principles on Business and Human Rights, which the UN Human Rights Council endorsed in 2011, recognize that all companies should respect human rights, avoid complicity in abuses, and ensure that any abuses that occur in spite of these efforts are adequately remedied. The Guiding Principles specify that businesses should exercise human rights due diligence to identify human rights risks associated with their operations, take effective steps to prevent or mitigate those risks, and ensure that the victims of any abuses that occur despite those efforts have access to remedies.^[240] The Guiding Principles are widely accepted as a legitimate articulation of businesses human rights responsibilities.

With respect to business responsibilities regarding childrens rights, the UN Committee on the Rights of the Child has maintained 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.^[241] The committee has also noted 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.[242]

The Childrens Rights and Business Principles, developed by United Nations Children's Fund (UNICEF), the UN Global Compact, and Save the Children, and launched in March 2012, encourage businesses 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 human rights 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.[243]

The Organisation for Economic Co-operation and Development (OECD) has set out guidelines for responsible behavior by multinational firms, incorporating the concept of human rights due diligence and the content of International Labour Organization (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. The guidelines also 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.[244]

The OECD and the Food and Agriculture Organization of the United Nations (FAO) have developed a five-step framework for human rights due diligence in agricultural supply chains: 1) establish strong management systems; 2) identify and assess risks in the supply chain; 3) develop a strategy for responding to the identified risks; 4) verify that human rights due diligence practices are effective; and 5) report publicly on supply chain human rights due diligence.[245]

Tobacco grown in Indonesia enters the supply chains of the worlds largest multinational tobacco companies, as well as Indonesian tobacco companies of various sizes. The largest tobacco companies operating in Indonesia include three Indonesian tobacco manufacturers PT Djarum (Djarum), PT Gudang Garam Tbk (Gudang Garam), and PT Njorono Tobacco International (Njorono) and two companies owned by multinational tobacco manufacturers PT Bentoel Internasional Investama (Bentoel), owned by British American Tobacco (BAT), and PT Hanjaya Mandala Sampoerna Tbk (Sampoerna), owned by Philip Morris International. Other Indonesian and multinational companies also purchase tobacco grown in Indonesia. Information about the companies is included below.

Most of the tobacco leaf produced in Indonesia is used in the large domestic market, but a large quantity of leaf is exported. Main export destinations include the United States, Belgium, Malaysia, and the Philippines.[246] According to the Central Bureau of Statistics, Indonesia exported about one-fourth of the total tobacco it produced in 2013.[247]

Tobacco farmers interviewed by Human Rights Watch sold tobacco in a number of ways. Most farmers sold tobacco leaf on the open market through intermediaries or middlemen. In this system, small farmers described selling tobacco to a central farmer or leader in the village, or a local buyer, who would pool tobacco from many small producers and sell it to warehouses owned by local businessmen or by larger national or multinational companies purchasing tobacco leaf. Interviewees used a number of terms to refer to the local tobacco traders or middlemen, including tengkulak, bandul, bandar, belandang, and others. In this system, the supply chain is often long and complicated, with many layers between farms and the companies purchasing tobacco leaf for use in tobacco products. Below, we refer to this tobacco purchasing model as the open market system.

As an alternative to this system, some farmers had developed relationships with individual tobacco companies and had opportunities to sell tobacco directly to representatives of the company, rather than through intermediary traders. In general, we refer to this model as the direct contracting system.[248] Under this system, some farmers signed written contracts to sell tobacco directly to tobacco manufacturing or leaf supply companies. These farmers often described participating in small groups or projects and receiving inputs such as seeds or chemicals as well as technical assistance from company technicians. Interviewees said companies had specific rules and requirements for how tobacco should be cultivated and cured. Participants then had the ability to sell tobacco directly to a buyer from a particular company, or directly to a company-owned warehouse. Other farmers did not sign written agreements with companies, but said they received some supplies and technical assistance from tobacco company representatives. Many farmers in the direct contracting system also sold some tobacco on the open market.

Human Rights Watch interviewed more than 60 tobacco farmers, tobacco leaf buyers and sellers, and warehouse owners in the four provinces where we conducted research. We identified human rights risks, including child labor and occupational health and safety hazards, in both the open market system and the direct contracting system.

Most farmers and traders selling tobacco exclusively through the traditional open market system acknowledged that it was common for children to work in tobacco cultivation. Most of the open market farmers and traders we interviewed had never met a company representative or tobacco buyer who had discussed the topic of child labor with them or visited farms during the season to monitor for child labor. Interviewees said no one had attempted to verify the conditions in which tobacco was grown or inspect for child labor or other human rights risks.

For example, a tobacco farmer and trader in Garut, West Java, told Human Rights Watch that he purchased tobacco from several farmers in his village in 2015 and drove eight hours to sell it to a larger trader in Central Java. He said the trader supplied tobacco to several Indonesian and internationally-owned companies factories, including Bentoel, Djarum, and PT Sadhana Arifnusa (Sadhana) Sampoernas main supplier.[249] When Human Rights Watch asked him whether he was ever questioned about child labor when he sold tobacco, he said, No, they dont ask. [The trader] doesnt know where the leaves come from. They just ask me to sell them as much as I can from any farmer in any area.[250]

A trader in Probolinggo, East Java, explained to Human Rights Watch that he purchased tobacco from smaller traders, repackaged it in a large processing area outside of his home, and sold it to a warehouse owned by Gudang Garam. Regarding the kinds of requirements the company had for growers in the supply chain, the trader said, It has to be good leaf. I have to maintain my quality. He said the company did not have any policy that addressed child labor, and company officials did not question traders about child labor. They dont ask about it. Theyve never mentioned child labor to me, he said. I dont know anything about child labor.[251]

Human Rights Watch interviewed David, a tobacco trader, at a warehouse in Pamekasan, East Java, where he was waiting to sell tobacco. He explained his role in the tobacco supply chain. My job is to take the tobacco from the farmers and bring it to the warehouse, he said. I buy from farms and sell it here.[252] Human Rights Watch interviewed the owner of the warehouse on the same day. He explained that he sold tobacco to Djarum and Gudang Garam, the two largest Indonesian tobacco companies. [Company officials] say employing children is forbidden in the warehouse and on the farms, he said. He insisted that he communicated this requirement to the traders from whom he purchased tobacco. We tell the banduls [traders] that children cant work in the field.[253] However, David, the trader, told Human Rights Watch, The [warehouse] owner never said anything about child labor to me. In my town, there are a lot of child workers.[254]

Similarly, Untung, a farmer and trader in East Java, said he buys tobacco from 20 farmers in his village and sells it to traders from warehouses that supplied large Indonesian and multinational companies including Djarum, Gudang Garam, and Sampoerna, as well as smaller warehouses owned by local businessmen. He told Human Rights Watch that the only requirements in place from either type of warehouse were related to quality: Whos helping us in the field? They dont care. They dont ask us.[255]

One East Java trader interviewed by Human Rights Watch said he bought tobacco from hundreds of farmers and sold it to Djarum, Gudang Garam, and Sadhana. He acknowledged that the companies had rules about how the tobacco was grown, including about how to maintain and treat the tobacco during planting and the timing of the harvest. When asked if they had rules about children working, he said, They dont have any rules about that. They dont say anything because they [the children] are only helping. They dont have any strict rules about it.[256]

Some tobacco traders interviewed by Human Rights Watch held identification cards that they said they needed in order to sell tobacco to certain warehouses. Human Rights Watch asked some traders about the criteria for obtaining identification cards, but we could not identify any formal or meaningful process by which traders obtained the cards or any other type of certification or registration to buy and sell tobacco. Many traders said they had held cards for many years or obtained them from friends or family members.

For example, Cipto, a 60-year-old trader in Probolinggo, East Java, told Human Rights Watch that in 2014 he purchased tobacco from many small farmers near his village, and sold it to a local warehouse supplying tobacco to Gudang Garam. Cipto said he was one of about 300 traders who sold truckloads of dried tobacco at

the warehouse. He had a blue identification card which he said he needed in order to buy and sell tobacco: A blue card means someone like me who buys from the farmer directly. When asked how he obtained the card, he said, A long time ago, my friend gave me a blue card to buy tobacco leaves. Before I got the blue card, I paid my friend to give me his card, so I could buy from the farmers.^[257]

With regard to any training or education on any topics required to obtain or possess the card, Cipto stated: I dont have any training at all. I know by myself how to tell the quality of the leaves. When asked whether Gudang Garam had any requirements regarding child labor, he said, They dont ask about child labor at all, he said. No one is asking about child labor. Cipto also stated that he never traveled to farms to check on the working conditions, I just look at the leaves here, he said, indicating he inspected them only after they had been harvested, cured, and prepared for sale. I dont go to the fields.^[258]

As described below, several of the companies that responded to Human Rights Watch acknowledged the complexities and potential risks in the open market system in Indonesia. Most of the companies described undertaking some activities to raise awareness about child labor and health hazards in tobacco farming among intermediary traders or in certain tobacco growing communities. However, none of the companies that responded indicated that they carried out meaningful human rights due diligence in the open market system, including to monitor for child labor. For example, Alliance One stated that its suppliers are required to abide by its global policies, and that each time its representatives visit a supplier sourcing tobacco on the open market, they look for risks with regard to child labor, but did not elaborate on what specific steps its representatives take.^[259]

In a letter to Human Rights Watch, Universal Corporation presented a frank assessment of the open market system, and described the scope of its involvement in that part of its supply chain as limited to communication on the day of sale of the tobacco leaf:

Companies purchasing tobacco on the open market in Indonesia risk purchasing tobacco produced by children working in hazardous conditions. As such, these companies risk contributing to and benefitting from child labor. All companies sourcing tobacco from Indonesia should establish and carry out robust human rights due diligence procedures to identify and address child labor and other human rights risks, even in complex, multilayered supply chains involving many intermediaries.

Human Rights Watch interviewed farmers who said they had produced and sold tobacco in recent years through direct contracts with several tobacco product manufacturing and leaf merchant companies, including Alliance One International, Export Leaf Indonesia (a company owned by British American Tobacco), Djarum, and Sadhana (a company supplying Sampoerna). Most farmers we interviewed who sold tobacco through the direct contracting system stated that they had received some training and education about health and safety from the companies with whom they contracted. Some farmers stated that they also received information about eliminating child labor. At the same time, Human Rights Watch found that existing practices are not sufficient to eliminate hazardous child labor in the supply chain.

Some farmers operating in the direct contract system said that some tobacco companies prohibited children from participating in certain kinds of work on tobacco farms, but most farmers reported that children under 18 still participated in many tobacco farming tasks, including those Human Rights Watch, and some tobacco companies, consider hazardous. For example, Human Rights Watch interviewed Ivan, a farmer in East Lombok, West Nusa Tenggara, with a 2015 contract to sell tobacco to Export Leaf Indonesia (ELI), a company owned by British American Tobacco, while a group of ten children and five adults prepared tobacco leaves for curing nearby. The rule is children above 14 may work in the tobacco farm. Theres no rule for who can help with the leaves, he said, indicating children of any age could perform the work that was being done outside the barn.^[261]

Many other contracted farmers insisted there were no restrictions at all on childrens work in tobacco farming. Abdi, another farmer in East Lombok, West Nusa Tenggara, with a contract to sell tobacco to ELI, said the company that purchased his tobacco provided safety training and had specific rules about curing, packaging, insurance, and many other things. But he said they had no rules about children working: There is no regulation about age, just the worker must be healthy and able to work. [The company] only needs us to provide the tobacco, so it doesnt care about the workers age.^[262] Tirta, a farmer in Sumenep, East Java, with a contract to sell tobacco to Sadhana, said the company did not have any restrictions on childrens work: They dont have any rules about that. Its up to the owner of the farm. They never, ever mention a rule about kids working.^[263]

Contracted farmers often reported that company representatives visited their farms at various points of the season to offer technical advice and check on the tobacco crop. Some farmers said that these company instructors would warn them that children should not be working. But others said the instructors came too infrequently, or at the wrong points in the season, to find children working.

For example, Human Rights Watch interviewed a group of four farmers, all in their mid-20s, in East Lombok, West Nusa Tenggara, in 2014. Two of the farmers had contracts with Sadhana, which supplies tobacco leaf to Sampoerna. Both farmers admitted that children often worked in the crop, even though company representatives had warned them that children should not be working. They said the company instructors only visited when children were not working: Lucky me, theyve never come when the kids were working. The supervisors only come when the harvest is almost done. They come to say hurry up and bring your leaves because you owe us money. The other contracted farmer added, They usually come in the morning when kids are still in school. If they came later, theyd see them working.^[264]

Most farmers said there was no meaningful consequence or penalty if children were found working, even in the event of repeated violations.

A technician employed by Sadhana in Sumenep, East Java, explained that his job was to train contracted farmers on the companys requirements. [The company] says no underage children can work in tobacco, he said, pointing to colorful anti-child labor posters hanging on the wall that the company had produced and distributed to farmers. He explained that it was common to find children working, and he believed that farmers flouted the rule: The farmers dont care about the rules at all. Its just a rule from the highest rank. So many times the technicians see the kids working in the fields like that. They talk to the people and talk about the [child labor] rule, but they [the farmers] dont care at all. Regarding any potential consequences for farmers using child labor, he said, Actually [the company officials] dont have any penalty for farmers. Well keep working together. Theyll still get seed from us and finance. We already tell the parents there cant be child workers in fields, even helping. If they dont care, its not our business anymore. When parents break the rule and keep the kids still working in the fields, it doesnt matter. We still keep continuing to work together.^[265] He did not know of any cases of the company discontinuing contracts with farmers due to child labor violations.

The instructors dont give any penalty or punishment because children working in tobacco is such a tradition, said a farmer in East Lombok, West Nusa Tenggara, who said he had a contract to sell to Alliance One International, an international leaf merchant company. Theres no conversation or question about the children, he said.^[266]

Hanif, a 45-year-old contract farmer in Probolinggo, East Java, sold his tobacco to Sadhana, a supplier to Sampoerna, and he said the company prohibited children from working: They have rules about kids working in tobacco, he said. But as a tradition as farmers, our children go to the fields to be a small help. So that rule is not really accepted here. When Human Rights Watch asked if there were any consequences if the company found children working, he said, Theres not really a penalty, actually. They just talk to us. Its not a strict regulation about kids working in the fields.^[267]

Some farmers with contracts to sell tobacco to a specific company told Human Rights Watch that they also purchased tobacco from independent farmers in their communities, packaged it together with the tobacco they had grown on their own farms, and sold all of it to the company with whom the farmer had a contract.

For example, a Magelang, Central Java, farmer contracted to sell tobacco to Djarum explained that he purchased additional tobacco from local farmers and sold it under his contract with the company. The farmers come here to sell [tobacco leaf] to me. There are so many of them too many to count, he said. The farmers want to sell to me because Im a partner [contracted farmer]. All the farms are supposed to follow the rules of Djarum. They dont all follow the rules, but I buy [tobacco] from them anyway. As long as Djarum doesnt know.^[268]

A farmer in East Lombok, West Nusa Tenggara, with a contract to sell tobacco directly to Export Leaf Indonesia (ELI), a company owned by British American Tobacco, explained how the system worked in his village: The independent farmer can sell their tobacco through the project [contracted] farmer. The project [contracted] farmer can sell the tobacco to the warehouse.^[269]

Due to the challenges presented above, companies sourcing tobacco through the direct contracting system in Indonesia risk profiting from hazardous child labor.

Human Rights Watch sought information regarding the human rights due diligence policies and procedures of Indonesian and multinational companies purchasing tobacco in Indonesia. In an effort to obtain responses from the most significant buyers of tobacco in Indonesia, we sent detailed letters asking for information on tobacco purchasing in Indonesia and child labor and human rights due diligence letters to four Indonesian companies and nine large multinational tobacco manufacturing and leaf supply companies, including all of the largest companies operating in Indonesia.

Human Rights Watch sent letters to four Indonesian companies: PT Djarum (Djarum), PT Gudang Garam Tbk (Gudang Garam), PT Nojorono Tobacco International (Nojorono), and PT. Wismilak Inti Makmur Tbk. (Wismilak). Despite repeated telephone calls and other attempts to reach these companies, only two of the four companies replied (Nojorono and Wismilak), but neither provided a detailed or comprehensive response to the questions we posed. A representative of Wismilak sent an email to Human Rights Watch stating that the company could not respond in detail because it is not directly connected with the tobacco farmers, but did not identify other actors in the supply chain who are directly in contact with growers.^[270] Nojorono replied in a letter and referred Human Rights Watch to GAPPRI (Gabungan Perserikatan Pabrik Rokok Indonesia), a cigarette manufacturers association, for information regarding tobacco farming, including child labor.^[271] Human Rights Watch subsequently wrote to GAPPRI, but they declined to meet with us.^[272] Human Rights Watch made repeated attempts to reach the largest Indonesian tobacco companies, Djarum and Gudang Garam, but they did not respond.

In addition to the Indonesian companies, Human Rights Watch sent letters regarding child labor and human rights due diligence to seven multinational tobacco product manufacturers: Altria Group, British American Tobacco (BAT), China National Tobacco, Imperial Tobacco Group (Imperial), Japan Tobacco International (JTI), Philip Morris International (PMI), and Reynolds American, as well as to two leaf merchant companies Alliance One International (Alliance One) and Universal Corporation (Universal), who sell tobacco to tobacco product manufacturers. China National Tobacco did not respond to Human Rights Watch.^[273] Altria Group stated that it did not source any tobacco leaf from Indonesia and did not have plans to do so.^[274] Copies of this correspondence can be found in the appendix to this report.^[275] There may be other multinational companies purchasing tobacco in Indonesia which are not mentioned in this report.

All of the multinational companies purchasing tobacco from Indonesia that responded to Human Rights Watch have child labor policies that are largely aligned and appear consistent with international standards, in particular key International Labour Organization (ILO) conventions. Specifically, all of these companies recognize the ILOs guidance on minimum age, with a minimum age for work of 15, with light work permitted for children age 13 to 15, unless national law is more protective.^[276] All of these companies policies also prohibit children under 18 from performing hazardous work.^[277]

There is increasing alignment among many multinational tobacco companies regarding the tasks that constitute hazardous work, including work involving direct contact with green tobacco leaf, such as topping, suckering, and harvesting, as well as work with hazardous chemicals, sharp tools, farm machinery, at heights, and other tasks, although there is not yet complete consensus among all companies. However, these companies do not put unambiguous restrictions on children handling dried tobacco leaf, despite the hazards related to tobacco dust and handling of dried leaves, where nicotine is still present. Some companies, such as JTI, allow for 16 and 17 year olds to perform hazardous work, as long as they receive protective equipment and training.^[278]

As another signal of increasing alignment in the tobacco industry regarding child labor policies, in December 2014, members of the Geneva-based Eliminating Child Labour in Tobacco Growing (ECLT) Foundation, which includes seven of the companies contacted for this report, signed a Pledge of Commitment to combat child labor and to eliminate all forms of child labor within tobacco-sourcing chains.^[279] The pledge requires members to respect and recognize the principles and rights enshrined in the International Labour Organization (ILO) Conventions and Recommendations on child labour and to uphold a robust child labor policy, minimum requirements on tackling child labor, and implementation consistent with the United Nations (UN) Guiding Principles on Business and Human Rights.^[280]

Human Rights Watch analyzed the human rights due diligence procedures of those companies that responded to our letters as thoroughly as possible, based on information provided by the companies, publicly available information on their websites, and interviews with child workers, tobacco farmers, and traders in Indonesia. Few of the companies have taken steps to be sufficiently transparent regarding their human rights due diligence procedures, particularly regarding their monitoring of compliance with their child labor policies throughout the supply chain as well as the results of internal monitoring and external audits. Transparency is a key element of effective and credible human rights due diligence.

The UN Guiding Principles on Business and Human Rights maintain that in order to account for how they address their human rights impacts, business enterprises should be prepared to communicate this externally, particularly when concerns are raised by or on behalf of affected stakeholders. The principles state that reporting should be of a form and frequency that reflect an enterprises human rights impacts and that are accessible to its intended audience and that reporting should cover topics and indicators concerning how enterprises identify and address adverse impacts on human rights.^[281]

Among the companies we studied, PMI appears to have taken the greatest number of steps to be transparent about its human rights policies and monitoring procedures, including by publishing on its website its own progress reports as well as several detailed reports by third party monitors.^[282]

Most multinational tobacco companies operating in Indonesia source tobacco through a mix of direct contracts with farmers and purchasing tobacco leaf on the open market, with some companies relying more heavily on one or the other purchasing model. Many companies acknowledged the challenges of effective human rights due diligence in the open market system. For this reason, several companies stated that they undertake community-based activities and engagement with other industry actors to address child labor and other concerns in the open market, described below. While these may be important initiatives, they should not be seen as a replacement for effective human rights due diligence by each company in its supply chain.

British American Tobacco (BAT) is a leading global tobacco company selling more than 200 products in over 200 markets around the world.^[283] BATs leading brands include Dunhill, Kent, Lucky Strike, Pall Mall, and Rothmans.^[284] BAT told Human Rights Watch that tobacco leaf purchased in Indonesia accounts for about 3.5 percent of its purchasing globally, and that it sources tobacco from Central Java, East Java, and West Nusa Tenggara. In Indonesia, BAT purchases 70 percent of its tobacco from contracted farmers in West Nusa Tenggara and 30 percent from middlemen agents. BAT has controlled the Indonesian company PT Bentoel Internasional Investama (Bentoel) since 2010.^[285]

BAT states that since 2000, the company has monitored human rights, labor practices, hazardous work, and environmental management through the Social Responsibility in Tobacco Production (SRTP) program, adopted by a number of tobacco product manufacturers. In Indonesia, this program covers all of its directly contracted farmers. According to BAT, the program sets out the minimum performance levels we expect of suppliers and demonstrates best practice by encouraging continuous improvement across the supply chain.^[286] The SRTP program relies on self-reporting by suppliers and onsite in-country audits every four years to verify these self-reports by AB Sustain, a company contracted to manage the SRTP program. The last onsite review by AB Sustain of leaf suppliers in Indonesia was in 2013.^[287]

In its letter to Human Rights Watch, BAT stated that in 2014 the overall score for all of its Indonesian suppliers on child labor, based on self-reporting, was 90 percent.^[288] The scores are driven by a suppliers ability to collect statistically robust data to identify the existence of child labor, school attendance, and activities carried out by children on the farm. According to BAT, a minimum standard of 60 percent means that data is robust, issues have been identified and programmes are being implemented to address issues.^[289]

BATs website states that AB Sustains onsite reviews include an in-depth analysis of the suppliers policies, processes and practices, as well as farm visits.^[290] BAT does not publish details regarding the specific indicators, methodology, or content of the SRTP self-reporting or the specific nature of the onsite audits, including, for example, how many farms AB Sustain visits during its onsite reviews. BAT stated that publicly sharing such information is not part of the agreement under the SRTP program.^[291]

BAT stated that the SRTP program has been revised and a new program, Sustainable Tobacco Production (STP), will be introduced in 2016, which includes improvements to the child labor section. Onsite audits by AB Sustain will take place on three year cycles, with an onsite review in Indonesia scheduled for 2016.^[292]

Regarding the open market system, BAT stated that it communicates its policies and expectations to middlemen agents selling tobacco leaf, but told Human Rights Watch that it has work to do in this area and that BAT is currently exploring options to ensure policies are respected across the full supply chain.^[293] BAT did not specify those steps in its correspondence with Human Rights Watch.^[294]

The UK-based Imperial Tobacco Group (Imperial) sells tobacco products in more than 160 countries worldwide, including Winston, one of the best-selling brands in the US.^[295] Imperial purchases about 1.4 percent of its global tobacco leaf from Central and East Java, and Indonesia is in the top 20 countries of Imperials sourcing. Through suppliers, Imperial purchases about 12 percent of tobacco from contracted farmers and the remainder from the traditional middleman trader system.^[296]

In a December 2015 letter, Imperial stated that all of its suppliers have contractual requirements to adhere to the Social Responsibility in Tobacco Production (SRTP, or SRITP, see also above, *British American Tobacco*) program, including requirements concerning child labor in line with ILO conventions on minimum age and hazardous work.^[297] In previous correspondence, Imperial specified a range of tasks which they define as hazardous to include harvesting, topping, handling pesticides or fertilizers, working at heights, working in extreme temperatures and for long hours.^[298]

Imperial stated that its suppliers undertake training and awareness-raising activities about standards and requirements with intermediaries in the open market system, and it monitors this through visits and information provided by suppliers.^[299]

Imperial stated that its monitoring for child labor in its supply chain includes audits conducted by AB Sustain, the organization contracted to conduct monitoring of labor and other issues in the supply chain.^[300] In addition, Imperial reported that a leaf sustainability manager visits a country two or three times per year, and visits 10 to 20 farmers per supplier, per visit to a country, which equates to approximately five percent of the farmer base.^[301] In its December 2015 letter, Imperial stated that it has not been made aware of any specific reports of child labour in its supply chain in Indonesia, but acknowledged that concerns exist.^[302] Imperial plans to conduct an independent Human Rights Impact Assessment across [its] value chain in 2016, according to information on its website.^[303]

Japan Tobacco International (JTI) is a leading global tobacco product manufacturing company headquartered in Geneva, Switzerland. It sources tobacco from 40 countries and sells tobacco products in over 120 countries, including Winston, the second leading brand worldwide.^[304] JTI sources about 1.3 percent of its global tobacco leaf purchases from Indonesia, through third party suppliers purchasing primarily through directly-contracted growers, as well as from the open market system, in Central Java, East Java, West Java, and West Nusa Tenggara.^[305]

JTI developed a global Agricultural Labor Policy (ALP) in 2013, which includes requirements on human rights and child labor, and prohibits hazardous work by children under 18, including working at heights, with toxic chemicals, topping, suckering, and harvesting, but allows children ages 16 to 18 to perform hazardous tasks provided they have the proper training and equipment.^[306] JTI is implementing the ALP in stages, with roll-out in Indonesia scheduled to begin in 2017, and plans for the program to be functional with all growers and suppliers in its global supply chain no later than 2019.^[307] JTI's plan for implementation includes training field technicians and farmers, supporting farmers to improve tobacco growing practices, observing the effect of the program, and tailoring it accordingly.^[308] JTI currently has no program to monitor for child labor or other human rights abuses in its supply chain in Indonesia.

JTI contends that the ALP roll-out takes time, in order to secure the commitment of growers and suppliers in the supply chain, understand the local conditions, and develop locally-relevant trainings.^[309]

Philip Morris International (PMI) describes itself as the leading international tobacco company, with six of the world's top 15 international brands, including Marlboro, the number one cigarette brand worldwide. PMI's products are sold in more than 180 markets.^[310] PMI's Indonesia affiliate HM Sampoerna purchases tobacco in Indonesia through four leaf suppliers, from East Java, Central Java, and West Nusa Tenggara. The total volume accounts for about 10 percent of PMI's worldwide leaf purchases.^[311] Sampoerna's four suppliers contract directly with individual tobacco farmers and farmer groups, accounting for a total of 60 percent of purchases in 2014.^[312] PMI has an Agricultural Labor Practices (ALP) code, which includes detailed prohibitions on child labor, which it implements globally.^[313]

In a detailed December 2015 letter to Human Rights Watch, PMI provided information about its human rights due diligence procedures, including the monitoring for child labor by field technicians the company says are in regular contact with the 27,000 farmers in the direct contract system, as well as other issues including ALP management and supervision, technicians training, written and video materials used to communicate child labor expectations, follow up procedures when child labor concerns arise on farms, and enforcement actions.^[314] In 2015, PMI piloted a program with two suppliers involving systematic ALP code monitoring by field technicians. This monitoring program identified 1,000 issues, 10 percent of which related to child labor.

In order to more thoroughly understand the nature of potential concerns in its supply chain in Indonesia, PMI commissioned external assessments that evaluate the ALP management process in place, as well as the farm level status, including among Sadhanas direct contract farmers and technicians during the 2015 crop season in Lombok, West Nusa Tenggara. The report, made public on PMI's website, identifies gaps in Sadhanas implementation of the ALP Program, issues and risks at the farm level, and Sadhanas action plan reflecting the improvement needs and steps to be taken to address the issues identified.^[315] The assessment found that larger numbers of staff facilitated ALP implementation, but that there were some gaps, such as additional training to improve understanding of child labor requirements, Green Tobacco Sickness, or other labor issues as necessary. As part of rolling out its ALP in Indonesia, PMI had also commissioned a third party assessment in 2012-2013 to assess risks and issues, including concerning child labor, and identified a number of concerns.

Regarding the open market system, PMI stated that it is not aware of any existing training or certification scheme focusing on child labor or labor practices for companies or individuals operating in the open market. HM Sampoerna has collaborated with a nonprofit organization to conduct education on labor, agronomy, and other issues in communities producing tobacco that is possibly entering PMI's supply chain through the open market. In 2015, the program operated in six areas and involved approximately 1,250 people. PMI detailed other initiatives it undertakes in an effort to reduce child labor, including: changing production methods, after school programs, and a scholarship program.

Reynolds American is the parent company of R.J. Reynolds Tobacco Company, the second largest US tobacco company, which produces three of the best-selling cigarette brands in the US: Newport, Camel, and Pall Mall.^[316] In response to a November 2015 letter from Human Rights Watch regarding child labor in Indonesia, Reynolds American responded in an email that it purchases 0.12 percent of its global tobacco leaf from Indonesia, through leaf dealers, and that monitoring of the dealers practices are assessed through AB Sustain's Leaf TC program, apparently referring to the SRTP program, mentioned above. Reynolds American did not specify from which leaf dealers it sources, nor did it provide any information about the nature of the SRTP program or any monitoring Reynolds American conducts in its supply chain in Indonesia.

Alliance One International (Alliance One) 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 and serving tobacco product manufacturers in over 90 countries.^[317] In Indonesia, Alliance One purchases tobacco overwhelmingly (92 percent) through direct contracts through its wholly-owned subsidiary PT.AOI, in East Java, Central Java, and West Nusa Tenggara.^[318]

Alliance One has implemented its Agricultural Labor Practices (ALP) program in Indonesia since 2011, requiring all PT.AOI direct contracted growers to respect child labor and labor standards, which are consistent with ILO conventions. The ALP program includes a hazardous work list regarding activities prohibited for children under 18. According to Alliance One, PT.AOI technicians conduct 20 to 24 scheduled visits and one unannounced visit to each contracted grower per year to provide guidance on ALP, including written information. Each PT.AOI technician is responsible for 48 to 55 growers.^[319]

Alliance One provided Human Rights Watch with some detail on its monitoring procedures in Indonesia. Monitoring includes collecting farm data, visual observation, grower interview, worker interview, and written documentation review. If a child labor violation is found, the PT.AOI technician will remind the grower of the contractual obligations, require that the child be moved to a different, non-hazardous task, and check for compliance in a follow up visit. Alliance One did not specify if the technicians subsequent visit would be announced or unannounced. If the violation continues, the technician will consult with superiors and the incident will be taken into consideration for future grower contracts.

Alliance One also provided data on incidents of child labor identified on PT.AOI contracted farms in Indonesia in 2013, 2014, and 2015, disaggregated by region, noting that most issues involved children ages 12 to 17 engaged in harvesting, tying, and sorting leaves. Alliance One also shared its analysis about the particular risks for child labor in Indonesia, depending on the region, the type of tobacco grown on a farm, and stage of production.

For purchases through third party suppliers, PT.AOI requires suppliers to undergo a background check to ensure that it does not have a record of illegal conduct and requires suppliers to abide by its global policies. During visits to the suppliers, Alliance One stated that PT.AOI representatives look for risks with regard to child labor, but did not elaborate on any other human rights due diligence procedures in this element of its supply chain.

According to its website, US-based Universal Corporation (Universal), operates in more than 30 countries and is the worlds leading leaf tobacco merchant, conducting business, including selecting, buying, shipping, processing, storing, and financing leaf tobacco to manufacturers of tobacco products.^[320] In a December 2015 letter to Human Rights Watch, Universal reported that it purchases only a very small percentage of tobacco grown in Indonesia which is sold to several large customers such as PMI (for domestic use) and Imperial.^[321]

Universal purchases tobacco in East Java and Central Java, through five different methods:

The company purchases 20 to 30 percent of its total volume through the four methods involving direct contact with growers, and the remainder on the open market. Regarding human rights due diligence, Universal implements the labor standards required by its clients, including PMIs ALP code and the SRTP program, and considers that there is little difference in approach between those programs concerning child labor, safety, and health requirements. As discussed above, Universal noted the challenges of the open market in Indonesia to include the difficulty in establishing any direct contact with the growers, and the large number of local buyers that purchase tobacco for domestic companies without labor standard programs.

Several companies reported on additional efforts in Indonesia to reduce child labor. For example, PT.AOI and HM Sampoerna, in partnership with Indonesian NGOs, local governments, and schools, support afterschool programs to reduce the time children spend on farms. The programs include activities like games, dance, music, and farming as well as education on farm safety and child labor.^[323] PMI reported 2,335 children enrolled in afterschool programs in 2015^[324] Alliance One reported 1,200 children participated in 2015.^[325] PMI and Alliance One also described supporting scholarship programs for children in rural communities.^[326]

Both PMI and Alliance One also said they had made efforts to reduce labor needs on farms, including by introducing a different technique for preparing leaves for curing: they said they provide farmers with metal clips that farmers can use to attach leaves to a stick or wire to be hung for curing, rather than having to pierce leaves with a stick or string tobacco on a bamboo stick, labor-intensive tasks often performed by children.^[327]

Universal stated that it supports various school programs on child labor that promote education for children and allow for monitoring of child activity in the fields and child attendance at school, but did not elaborate on the number of children involved or the mechanisms for implementation of the program.^[328]

In September 2015, the Eliminating Child Labour in Tobacco Growing (ECLT) Foundation approved an Indonesia Country Plan to analyze the tobacco market in Indonesia with regard to child labor and hazardous child labor and to expand stakeholder engagement to reduce child labor.^[329] The ECLT Foundation stated that it developed a strategy for the first two years of work in Indonesia (2016-2017), consisting of two main elements: (1) [a] child labour survey in selected tobacco-growing areas of East Java and Lombok with key stakeholder engagement, and (2) targeted awareness-raising, relationship building and support to local government efforts to eliminate child labour in agriculture and in general.^[330]

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^[1] Ayu is a pseudonym, as are the names of all children quoted in this report.

^[2] Food and Agriculture Organization of the United Nations, Statistics Division (FAOSTAT), Food and Agricultural Commodities Production/Countries by Commodity, 2013, http://faostat3.fao.org/browse/rankings/countries_by_commodity/E (accessed December 15, 2015). The volume of tobacco produced in Indonesia has fluctuated in recent years. According to data provided to Human Rights Watch by the Indonesian Ministry of Agriculture, Indonesia produced 202,292 metric tons of tobacco in 2014, as compared to 173,378 metric tons in 2013 and 266,994 metric tons in 2012. Email from Indonesian Ministry of Agriculture, to Human Rights Watch, October 19, 2015.

^[3] Indonesian Ministry of Agriculture, Directorate General of Estate Crops, Tree Crop Estate Statistics Of Indonesia, December 2014, <http://ditjenbun.pertanian.go.id/tinymcepuk/gambar/file/statistik/2015/TEBAKAU%202013%20-2015.pdf> (accessed December 16, 2015), pp. 29-33.

^[4] Indonesia exported 41,765 metric tons of tobacco in 2013. In the same year, Indonesia imported 121,218 metric tons of tobacco, valued at more than \$627 million. Ibid., p. 4.

^[5] Ibid., p. 5.

^[6] Ibid., p. 1.

^[7] Ibid. Smallholder is not defined in the Ministry of Agriculture report, but a 2005 study commissioned by the World Bank found that many farmers in the province of Central Java cultivated plots of land between 0.25 and 0.5 hectares. See John C. Keyser and Nila Ratna Juita, Smallholder Tobacco Growing in Indonesia: Costs and Profitability Compared with Other Agricultural Enterprises, *World Bank Human Development Network Discussion Paper*, February 2005, <http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/281627-1095698140167/KeyserINDTobaccoGrowingFinal.pdf> (accessed December 16, 2015), p. 5.

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^[9] Email from Indonesian Ministry of Agriculture, to Human Rights Watch, October 19, 2015, p. 2.

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[29] Only 98 of the 132 children interviewed for this report were able to estimate the age at which they began working in tobacco farming. The data reported here reflects the responses of those 98 children.

[30] No child interviewed by Human Rights Watch performed every task listed, but most children performed multiple tasks.

[31] Human Rights Watch interview with Budi, 16, and Agus, 17, Magelang, Central Java, September 16, 2014.

[32] Human Rights Watch interview with Awan, 15, Pamekasan, East Java, June 16, 2015.

[33] Human Rights Watch interview with Kristina, 17, Pamekasan, East Java, June 16, 2015.

[34] Human Rights Watch interview with Matius, 17, Pamekasan, East Java, June 16, 2015.

[35] See for example, Human Rights Watch interview with Muthia, 11, Probolinggo, East Java, September 9, 2014, who said she received 10,000 rupiah for two hours of work and 20,000 rupiah for four hours of work bundling tobacco leaves; Human Rights Watch interview with Natalia, 13, East Lombok, West Nusa Tenggara, August 28, 2015, who said she received 20,000 rupiah for harvesting tobacco from 2:00 p.m. to 5:30 p.m.; Human Rights Watch interview with Ariana, 15, Sampang, East Java, September 11, 2014, who said she received 10,000 rupiah for bundling tobacco from 6 a.m. to 12 p.m.

[36] See for example, Human Rights Watch interview with Musa, 16, Garut, West Java, June 11, 2015, who said he received 20,000 rupiah for harvesting tobacco from 6:30 a.m. to 4:30 p.m.; Human Rights Watch interview with Hitu, Sumenep, East Java, June 15, 2015, who said he received 50,000 rupiah for harvesting tobacco from 6 a.m. to 12 p.m.; Human Rights Watch interview with Catur, 15, Magelang, Central Java, September 15, 2015, who said he received 30,000 rupiah for working from 7 a.m. to 5 p.m.; Human Rights Watch interview with Pila, 15, Garut, West Java, June 12, 2015, who said she received 35,000 rupiah for harvesting tobacco from 7 a.m. to 5 p.m.

[37] See for example, Human Rights Watch interview with Ijo, farmer, Garut, West Java, June 11, 2015, who said men received 40,000 rupiah per day and women received 30,000 rupiah per day; Human Rights Watch interview with Hakan, farmer, Jember, East Java, June 18, 2015, who said men received 30,000 rupiah for a half day of work, and women received 25,000 rupiah for a half day of work; Human Rights Watch interview with Safi, farmer, East Lombok, West Nusa Tenggara, August 29, 2015, who said men received 50,000 rupiah per day and men received 40,000 rupiah per day.

[38] See for example, Human Rights Watch interview with Marta, 11, East Lombok, West Nusa Tenggara, August 28, 2015, who said she received 12,000 rupiah for three hours of work; Human Rights Watch interview with Sella, 12, East Lombok, West Nusa Tenggara, August 30, 2015, who said she received 30,000 rupiah for eight hours of work; Human Rights Watch interview with Safiya, 15, Jember, East Java, June 19, 2015, who said she received 10,000 rupiah for five hours of work.

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[41] Human Rights Watch interview with farmer, Temanggung, Central Java, September 14, 2014.

[42] Human Rights Watch interview with Ratih, 11, Jember, East Java, June 19, 2015.

[43] Human Rights Watch interview with Ana, 48, farmer, Jember, East Java, June 19, 2015.

[44] Human Rights Watch interview with Ijo, farmer, Garut, West Java, June 11, 2015.

[45] Human Rights Watch interview with Sinta, 13, Norul, 13, and Sari, 14, Magelang, Central Java, September 15, 2015.

[46] Human Rights Watch interview with Utari, 13, Probolinggo, East Java, September 9, 2014.

[47] ILO International Programme on the Elimination of Child Labour (IPEC), Child Labour in Agriculture.

[48] Human Rights Watch interview with Hanif, 45, farmer, Probolinggo, East Java, June 20, 2015.

[49] Human Rights Watch interview with Maya, 44, farmer, Garut, West Java, June 12, 2015.

[50] 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 I.L.M. 1207 (entered into force November 19, 2000), ratified by the United States on December 2, 1999, art. 3.

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[59] Human Rights Watch interview with Aman, 18, Sumenep, East Java, June 15, 2015.

[60] Human Rights Watch interview with Ayu, 13, Garut, West Java, June 12, 2015.

[61] Human Rights Watch interview with Rio, 13, Ismaya, 13, Sugi, 14, and Akmad, 14, Magelang, Central Java, September 14, 2014.

[62] Human Rights Watch interview with Eddi, 16, Magelang, Central Java, September 15, 2015.

[63] Human Rights Watch interview with Indirah, 15, Jember, East Java, June 19, 2015.

[64] Human Rights Watch interview with Leah, 14, Garut, West Java, June 12, 2015.

[65] Human Rights Watch interview with Maya, 44, farmer, Garut, West Java, June 12, 2015.

[66] Human Rights Watch interview with Nadia, 16, Flor, 13, and Tanya, 10, Bondowoso, East Java, June 19, 2015.

[67] Human Rights Watch interview with Yulia, 13, Murni, 11, and Hani, 10, East Lombok, West Nusa Tenggara, September 20, 2014.

[68] Human Rights Watch interview with Riko, 15, East Lombok, West Nusa Tenggara, August 30, 2015.

[69] Human Rights Watch interview with Putria, 12, Mira, 14, and Emilia, 12, Probolinggo, East Java, September 10, 2014.

[70] Human Rights Watch interview with William, 16, and Hairul, 14, Sampang, East Java, September 12, 2014.

[71] Human Rights Watch interview with Raden, 14, Sumenep, East Java, June 15, 2015.

[72] Human Rights Watch interview with Peni, 13, Magelang, Central Java, September 15, 2014.

[73] Human Rights Watch interview with Rexi, 15, Topan, 14, Riski, 12, and Michael 15, Magelang, Central Java, September 15, 2014.

[74] Human Rights Watch interview with Yulia, 13, Murni, 11 and Hani, 10, East Lombok, West Nusa Tenggara, September 20, 2014.

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- [79] Human Rights Watch interview with David, 16, Probolinggo, East Java, June 20, 2015.
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- [90] Human Rights Watch interview with Argo, 15, Pamekasan, East Java, June 16, 2015.
- [91] Human Rights Watch interview with Sartoro, 16, Probolinggo, East Java, June 20, 2015.
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- [96] Human Rights Watch interview with Seto, 14, Sampang, East Java, September 11, 2014.
- [97] Human Rights Watch interview with Ayu, 13, Garut, West Java, June 12, 2015.
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- [259] Letter from Pieter Sikkel, president and chief executive officer, Alliance One International, to Human Rights Watch, December 14, 2015.
- [260] Letter from H. Michael Ligon, vice president, Universal Corporation, to Human Rights Watch, December 24, 2015.
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- [263] Human Rights Watch interview with Tirta, 45, farmer, Sumenep, East Java, June 15, 2015.
- [264] Human Rights Watch group interview with four farmers, East Lombok, West Nusa Tenggara, September 20, 2014.
- [265] Human Rights Watch interview with Kevin, 31, technician, Sumenep, East Java, June 15, 2015.
- [266] Human Rights Watch interview with Stanley, 34, farmer, East Lombok, West Nusa Tenggara, August 30, 2015.
- [267] Human Rights Watch interview with Hanif, 45, farmer, Probolinggo, East Java, June 20, 2015.
- [268] Human Rights Watch interview with farmer, Magelang, Central Java, September 15, 2015.
- [269] Human Rights Watch interview with Ivan, farmer, East Lombok, West Nusa Tenggara, August 28, 2015.
- [270] Email from Surjanto Yasaputera, corporate secretary, PT. Wisnilak Inti Makmur Tbk. (Wisnilak), to Human Rights Watch, January 6, 2016.
- [271] Letter from Stefanus JJ. Batihalim, PT. Nojorono Tobacco International, to Human Rights Watch, December 23, 2015.
- [272] Human Rights Watch telephone conversation with Hasan Aoni Azis, GAPPRI (Gabungan Perserikatan Pabrik Rokok Indonesia), April 4, 2016.
- [273] China National Tobacco has not responded to numerous letters sent by Human Rights Watch since December 2013.
- [274] Letter from Linwood Sykes, director, Leaf Procurement, Altria Client Services, to Human Rights Watch, November 20, 2015.
- [275] Copies of Human Rights Watch's correspondence with the companies is available in the appendix to this report. Human Rights Watch has also engaged in correspondence and met with these companies (except China National Tobacco) regarding research on hazardous child labor in tobacco farming in the United States. See Human Rights Watch, *Tobaccos Hidden Children: Hazardous Child Labor in United States Tobacco Farming*, May 2014, <https://www.hrw.org/report/2014/05/13/tobaccos-hidden-children/hazardous-child-labor-united-states-tobacco-farming>. Company correspondence available in the appendix to the report at: <https://www.hrw.org/sites/default/files/reports/us0514AppendicesFullLR.pdf>. See also Human Rights Watch, *Teens of the Tobacco Fields: Child Labor in United States Tobacco Farming*, December 2015, <https://www.hrw.org/report/2015/12/09/teens-tobacco-fields/child-labor-united-states-tobacco-farming>. Company correspondence available in the appendix to the report at: https://www.hrw.org/sites/default/files/report_pdf/appendicesfull_0_0.pdf.
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- [327] Ibid.
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- [329] The letters to Human Rights Watch from Coleta, Galbraith, Green-Mann, Ligon, and Sikkel all describe the plan.
- [330] Email from Karima Jambulatova, programme manager, ECLT Foundation, to Human Rights Watch, April 18, 2016.
- [331] As noted above, the term child labor, consistent with International Labour Organization (ILO) 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.

Exposed to Harmful Nicotine, Pesticides

Child Labor in United States Tobacco Farming

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