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Accident factories

Unhealthy and unsafe working conditions
in Brazilian meatpacking

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Executive Summary

Brazil is a **global meat stronghold**. The country is the world's leading meat exporter, a major producer, and home to some of the largest meat companies, including JBS, **the largest globally**. More than 600,000 Brazilians work in meatpacking. Each year, they butcher **over 6 billion animals, mostly chickens, but also many millions of cows and pigs**.

Meat production is a pillar of the Brazilian economy. The country's beef value chain alone is responsible for 10% of the country's GDP. However, while the industry prospers economically, livestock production in Brazil continues to involve a range of controversial practices. These include massive emissions of greenhouse gases, deforestation for pastures and feed production, dispossession of Indigenous peoples' land, and modern slavery.

This report focuses on meatpacking, the other foundation of Brazil's meat industry alongside livestock production and far less researched. Interviews with 63 workers and former workers and with industry specialists, reveal that workplace and health and safety in cattle slaughtering and beef processing is, as in cattle raising, also highly problematic, including in the largest two Brazilian meat firms, JBS and Marfrig.

Meatpacking is a risky business. Workers must handle potentially dangerous tools such as knives and saws, use force to cut parts or sometimes whole animals, and repeatedly perform short and quick movements to separate the cuts that will eventually arrive on tables all over the globe. During long working days in extreme temperatures, meatpacking workers are continuously under pressure to meet high production targets for low pay.

In 2019, meat workers suffered four times more from work-related accidents and 10 times more from occupational diseases than the average worker in Brazil. In the beef industry specifically, almost 5,000 accidents were officially reported in 2021, including 13 fatalities, for a workforce of 137,000. When compared with available international statistics, the officially reported incidence of accidents in Brazilian meatpacking is high, especially in terms of fatalities.

According to workers interviewed for this report, the work is "physically and mentally exhausting" because of the "frantic pace of production". There is "unbearable noise", "from machines and people hitting the stainless-steel structures with boxes of frozen meat", and "buzzing in our ears afterwards". Victims of accidents tell of "excruciating headaches", "chest pains, shortness of breath", and anxiety. Workers report routine accidents including cuts on fingers, hands, arms, and mouths, machines hitting their feet or trapping their knees, reels falling, and knives and hooks hitting colleagues instead of cattle.

There are accounts of people contracting urinary infections from not being able to go to the toilet when they need, and of people not reporting sick, even when injured, for fear of losing their jobs. Meat workers report taking painkillers for their "back, shoulders, arms", and needing physiotherapy. They report infected wounds, "crying with pain", "everything ... aching and burning", "hands red and hurt" from the cold, and skin and eye pains from exposure to chemicals despite wearing company-provided protection.

Brazil has a specific law for preventing and addressing health and safety problems in meatpacking plants. Adopted in April 2013, Regulation 36 (widely known as NR-36) followed a long period when meat companies had been widely criticised for subjecting workers to unsafe and unhealthy conditions. However, one decade later, our findings show that health and safety issues are still a major concern.

A large majority of employees (84%) interviewed at leading meatpacking firms such as JBS and Marfrig report having work-related illness, and many (40%) have suffered workplace accidents. Almost all respondents (93%) report thermal discomfort; a large majority (87%) work overtime; and fewer than half the workers interviewed take the mandatory breaks – all of which industry experts agree can lead to more accidents and illness.

Brazilian labour authorities and others corroborated the occurrence, type, and gravity of work-related health problems workers reported. For some of these health and safety issues, workers are seeking to obtain their rights through the courts, and a number of cases have been decided in their favour.

The interviews reveal that meat companies in Brazil do not take the measures needed to significantly reduce the risks of accidents and occupational illness. Many workers report not having adequate personal protective equipment (PPE) (26%), not taking mandatory breaks (52%), and exposure to ammonia leaks (65%).

When prompted for a response to the study's findings, JBS and Marfrig stress that they comply with the law and claim not to recognise the problematic conditions we discovered in their factories.

Although meatpacking companies publicly deny having a workplace health and safety problem, however, the industry goes to great lengths to cover up any problems and to undermine structural solutions. Companies under-report accidents, mislead government inspections, foster a climate of fear to prevent workers from claiming their rights, and retaliate towards those who do.

The industry also opposes regulation to improve workplace conditions such as the abolition of overtime, and it supports attempts to weaken industry-specific health and safety regulation.

The report's main recommendations for improving health and safety in meatpacking in Brazil are that companies fully comply with, and the Brazilian government strengthens enforcement of, NR-36. Company compliance should include better reporting of accidents and investing in dialogue with trade unions. On the government side, more inspectors and inspections are needed, and more inspections should be unannounced. We also recommend reforms of the country's labour standards framework to reduce overall working time, including overtime, in sectors such as meatpacking with the highest health and safety risks.

1. Introduction

Industrial livestock farming leads to **major biodiversity loss, environmental degradation, and deforestation** around the world. It has harmful impacts on animal welfare, workers, and communities and is responsible for between 11% and 20% of all human-**induced global greenhouse gas emissions**.

Credits: © Jai Mansson



On 18 April 2013, after more than a decade of debate, the Brazilian government adopted a specific regulation for health and safety in meatpacking.¹ This was National Regulation 36 of the Ministry of Labour and Employment, colloquially referred to as NR-36.² The sector had previously been under strong criticism, including for the frantic pace of work imposed by employers.³ During the 10 years since NR-36's implementation, Brazil's meatpacking industry has grown steadily, requiring the industry to hire more workers and to maintain its rapid production tempo.⁴

The research that informs this report focuses on workplace health and safety in Brazil's beef-processing industry. In terms of revenue and contribution to national GDP, beef is the most important segment of the country's meat industry.⁵ International controversy around Brazilian beef production, especially in the last decade, has centred on cattle farming because of the many reports of landgrabbing, illegal deforestation, and modern slavery. However, there is less awareness of industrial meat production's adverse impacts downstream of cattle farming and less independent research on this topic, which this report intends to change.

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Objectives and approach

The objectives of this report by Repórter Brasil's research programme and SOMO are to assess working conditions in cattle meatpacking in leading Brazilian firms and to propose recommendations to improve these conditions. Our main research focus is on the prevalence and nature of health and safety issues affecting workers. We discuss the findings in the context of the first decade since the passing of NR-36, which was designed specifically to improve health and safety in the meatpacking sector. Other focal points are wages and freedom of association.

Repórter Brasil's research programme conducted a survey comprising semi-structured interviews with current and former employees of three meatpacking companies in two Brazilian states. We also interviewed other industry stakeholders including public officials at the Ministry of Labour and Employment, labour prosecutors, and trade union officials for more context and background, as well as to gain a better sense of the prevalence of issues that workers raised.

Worker interviews

In April 2023, Repórter Brasil's research programme undertook interviews with workers from seven different meatpacking factories in two Brazilian states, Rondônia and Mato Grosso do Sul. The sample aimed to include facilities of the largest meatpacking companies in areas with different social and economic development profiles. This was to capture potential differences in working conditions resulting from differences in local labour markets (Box 1).

Box 1. Survey interviews in Rondônia and Mato Grosso do Sul

Rondônia state is located in northwest Brazil, bordering Bolivia in the Amazon biome. Its development relates historically to the occupation of the forest, with first rubber exploitation, then gold mining, and more recently agricultural activities, mainly cattle farming.⁶ Cattle ranching is today the main driver of deforestation in the Amazon.

Our survey sample included three JBS meatpacking plants in Rondônia– in Vilhena, São Miguel do Guaporé, and Pimenta Bueno municipalities. All these JBS units have a history of buying cattle from deforested farms.⁷ JBS is the world's largest meat-processing company and Brazil's largest food processor.

Additionally, in Ji-Paraná municipality, also in Rondônia state, we interviewed former employees of the plants of two other large Brazilian meat companies: Marfrig, the country's second largest food processor (whose Ji-Paraná plant closed in 2021), and Distriboi. We included the surveys in Ji-Paraná in the overall survey results, but did not report on them specifically, to keep the focus on the largest Brazilian companies and active units.

We also held interviews in **Mato Grosso do Sul state** in Brazil's centre-west, bordering Paraguay. In Bataguassu municipality, which borders São Paulo, Brazil's richest state, the sample included two Marfrig plants: the company's slaughterhouse unit and its hamburger facility (the latter is considered the company's most modern).⁸

The biomes in Mato Grosso do Sul are Cerrado (savanna), Atlantic Forest, and Pantanal (tropical wetlands). Cattle ranching is the main driver of deforestation in the Amazon, but is also impacting other forests.⁹



Credit:© Isabel Harari/Repórter Brasil

The worker interviews included questions about working hours, wages, illness, accidents, trade unions, and health and safety. As well as open questions, some questions could be answered with a single word such as 'Always', 'Often', 'Rarely', or 'Never', but always with an opportunity to add more detailed answers. Where respondents reported issues of special significance, we conducted more in-depth follow-up interviews.

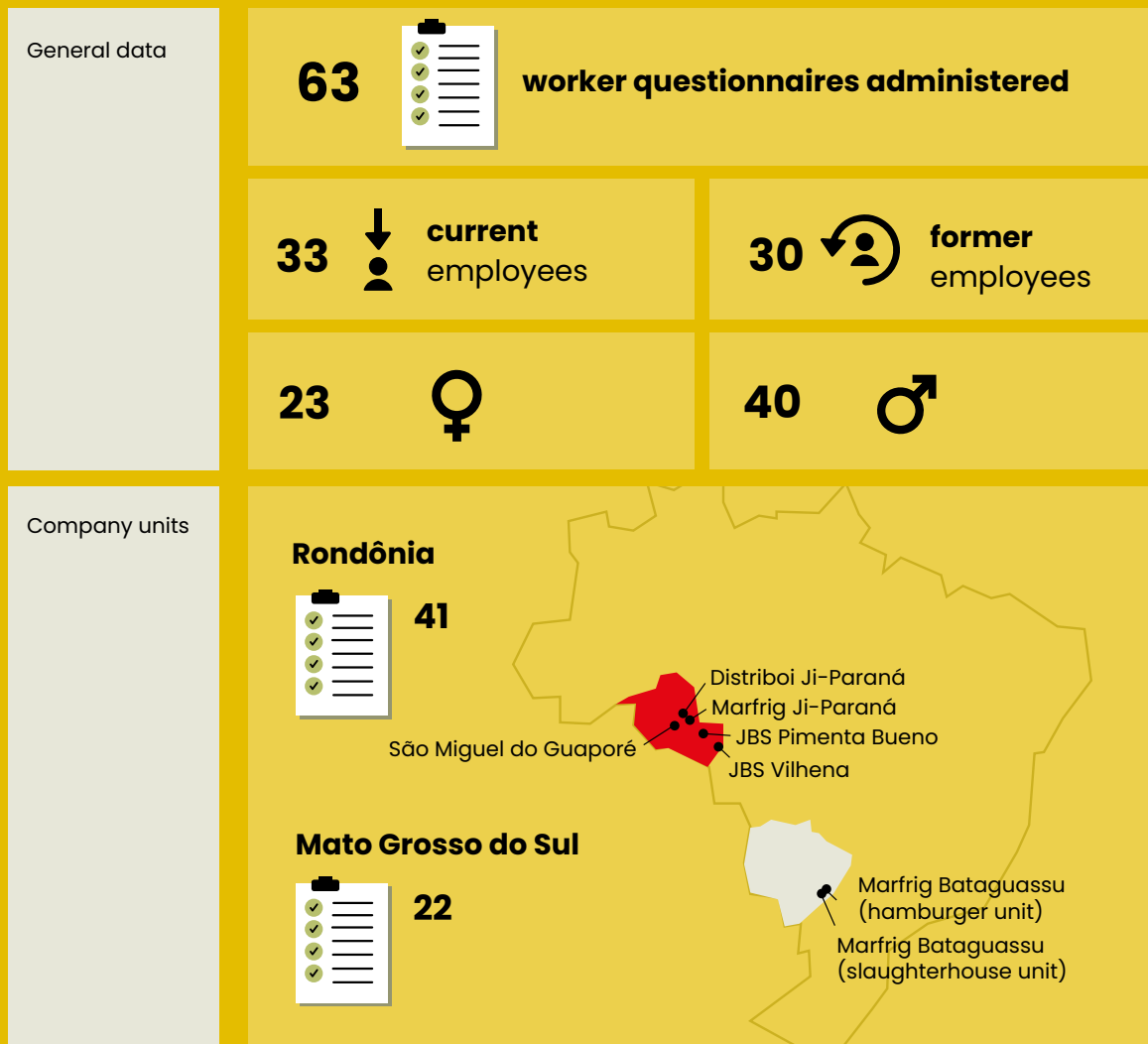
Worker sampling and interview conditions

Repórter Brasil obtained contact details of workers for potential interviews from local trade union representatives and from workers previously contacted (snow-balling). We contacted most workers for interview by telephone but also approached a small number in front of one of the plants sampled.¹⁰

To prevent factory management knowing about or interfering with interviews, we mainly held interviews in safe places such as in cars, at workers' homes, and at the local union headquarters. When workers were unavailable for meetings, we administered the survey questionnaire by telephone. All interviews were conducted under condition of anonymity. However, many workers still refused to participate in interviews for fear this would get them into trouble with their employer.

We cross-checked details from testimonies and the figures collected with documents such as legal proceedings and public recommendations, and we complemented and further validated the findings via interviews with public officials and other stakeholders.

Box 2. Survey details



Report structure

Following this Introduction, **Chapter 2** of the report presents an overview of the global meat industry to provide the context in which the Brazilian industry operates. The chapter's first section provides key facts and figures on the main meat products and international trade and introduces the leading producing and trading countries and leading corporate players. The second section describes industry working conditions around the world, while the third focuses on occupational health and safety.

As Brazil is such an important meat-producing country, Chapter 2 also includes specific figures and details for this country on working conditions, including in the beef sector.

In Chapter 3 the focus moves away from the global industry and all main meat products to centre on beef meatpacking in Brazil. The first section provides more detail on the characteristics of beef production and trade and its importance in the national economy. The second section looks at the meat industry's main Brazilian and global protagonists. The third section briefly discusses controversial practices the industry is associated with: deforestation, methane emissions (climate change), and slave labour.

Chapter 4 takes a deep dive into working conditions in Brazil's beef industry, presenting our findings on the most important aspects of workplace health and safety. Results from interviews with workers and other stakeholders form the basis for the discussion of each topic; however, the chapter also presents and considers statistics and other findings obtained from desk research. The closing sections of the chapter discuss structural factors in the industry, starting with the under-reporting of workplace accidents and illness, which in combination prevent the Brazilian authorities – and companies – from adequately addressing the status quo including health and safety problems.

In Chapter 5 we present and discuss the research findings more comprehensively and in more detail, looking at impacts on the health and safety of Brazilian beef workers at several major meatpacking plants where we undertook survey interviews.

Chapter 6, which closes the report, reviews and discusses the findings of the different chapters, presents conclusions, identifies approaches to address problem areas in the meatpacking industry, and offers recommendations for companies and the Brazilian authorities.

2. The global meat industry

This chapter provides a **short overview of the global meat industry** as context for our discussion of the industry in Brazil.

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Key facts and figures

From 2020 to 2022, 20% of global meat production comprised beef, 40% was poultry, 34% pork, and 5% lamb. Global meat production has been projected to increase by 12% by 2032 compared to the 2020–22 average, with beef production projected to grow by 9%, poultry by 14%, pork by 11%, and lamb by 15%.¹¹

The world's three largest beef-producing countries are the USA with 22% of global production in 2022, Brazil 17%, and China 12%. In terms of beef exports, Brazil leads globally, with 24% of all trade by volume, far ahead of other major exporting countries such as the USA (13%) and Australia (10%).¹²

The ranking is similar for production and export of poultry meat. In 2022, the USA was the leading producer and Brazil second, but for export it was the other way round.¹³

China is the largest producer of pork, generating more than twice the volume of the EU, which ranks second, and more than 10 times as much as Brazil, which ranks fourth behind the USA. The EU leads world pork exports ahead of the USA and Brazil.¹⁴

Overall, Brazil is the leading meat exporter globally as well as one of the largest producers.¹⁵ Brazil's meatpacking sector employs more than 600,000 workers,¹⁶ who butcher and process over 6 billion animals annually.¹⁷



Big meat

A small group of large Brazilian and US companies dominate the global beef market. In terms of daily slaughter capacity per head of cattle, the top four companies are JBS (Brazil) with 75,000, Marfrig (Brazil) with 30,100, Minerva (Brazil) with 29,540, and Tyson (USA) with 22,142.¹⁸

In poultry JBS also leads global production with 4.4 billion birds slaughtered annually, ahead of Tyson's 1.9 billion and Brazil's BRF's 1.7 billion.¹⁹

China is home to two of the world's three largest pork production companies. Muyuan Foodstuff's operations in 2022 involved 2.8 million breeding sows producing 61 million pigs of which 7.4 million were slaughtered in 2022. Based on the number of sows, China's Wens Group comes second (1.4 million) and the USA's Smithfield Foods/WH Group third (1.2 million).²⁰



Meat worker conditions around the world

Growing 1.2% annually,²¹ the global meat industry faces significant challenges, including extremely poor working conditions. Exhausting working hours, low wages, unhealthy environments, precarious work arrangements, exploitation, and harassment are routine in meat-processing plants around the world (Box 3).

Box 3. Problematic working conditions in meat processing worldwide

In the last two decades, numerous reports have documented problematic working conditions and labour right violations in meatpacking internationally. On the industry in the USA, for example, Human Rights Watch published *Blood, Sweat, and Fear: Workers' Rights in U.S. Meat and Poultry Plants* in 2005,²² followed 11 years later by Oxfam's *No Relief: Denial of Bathroom Breaks in the Poultry Industry*.²³

In Brazil, Repórter Brasil has documented the plight of meat workers in *Carne, Osso* (2011),²⁴ *Brazil's poultry industry* (2016), *Brazilian meat and the EU-Mercosur agreement* (2021),²⁵ and 'Brazilian union sues JBS over alleged exploitation of chicken workers' (2023).²⁶

Reports on the situation in the EU and the UK include the European Federation of Food, Agriculture, and Tourism Trade Unions (EFFAT) report *Hungry for fairness: raising standards in the meat sector. EFFAT's 10 demands for action at EU level* (2020),²⁷ Migrant Rights Centre Ireland's *Working to the bone: Experiences of Migrant workers in the Meat Sector in Ireland* (2020),²⁸ and the Guardian's, "The whole system is rotten": life inside Europe's meat industry' (2021).²⁹

In Asia, various reports have documented the dire situation in Thai poultry processing, including Finnwatch's *Employment available in exchange for debt: Working conditions in the Thai broiler industry* (2015).³⁰

Covid-19 and the meat sector

During the Covid-19 pandemic, meatpacking plants were identified as a vector for the spread of the virus (Box 4). The corona outbreak put a spotlight on the difficult working and living conditions that many meatpackers experience.

Studies found that meatpacking workers in conditions with lower temperatures and/or reduced ventilation intensity had relatively higher risks of Covid-19 infections.³¹ A review of research into workplace coronavirus outbreaks shows that meatpacking brings together most of the factors associated with high infection risks; these include “high density workplaces, close working, low use of personal protective equipment, shared rest areas, night shift working, shared accommodation and multiple site working, subcontractor workers, staff shortages”.³²

In Germany, the meat industry’s role in the pandemic was a catalyst for regulation to improve conditions by banning subcontracting, posting, and temporary work.³³

Box 4. Meatpacking as a coronavirus vector in the USA and Brazil

Researchers in the USA found early in the Covid-19 pandemic that the existence of large meatpacking facilities in a county increased infection rates by 110% compared with counties without such facilities.³⁴ Large pork- and poultry-processing facilities increased transmission rates by 160% and 20% respectively. The researchers estimated that 334,000 infections in the USA were attributable to meatpacking plants, with associated mortality and morbidity costs of over US\$ 11.2 billion.

Many thousands of US meat workers contracted coronavirus infections, and at least 250 died.³⁵ Despite an increasing number of cases, executives of major US meat corporations lobbied successfully to keep the plants open, according to a congressional investigation.³⁶

In August 2020, the Brazilian authorities found that JBS was rationing employees’ protective masks and forcing infected people to continue working at the plants.³⁷ More than 30 lawsuits were filed by trade unions and labour prosecutors as a result of the problems in Brazilian meatpacking plants during the pandemic.³⁸ Brazil’s Labour Prosecution Service ordered 80 companies to take specific measures to prevent the virus from spreading.³⁹

Occupational health and safety

Occupational health and safety are one of the main concerns for workers in the global meat industry.⁴⁰ Migrant Rights Centre Ireland (MRCI) found that almost 60% of the 151 workers it surveyed in 2020 had been injured during work in Irish meatpacking plants.

International statistics

Few if any recent and comprehensive official statistics on fatal and non-fatal accidents in meatpacking worldwide are available. Statistics offices in a number of countries publish health and safety figures on broader classifications such as manufacturing and food manufacturing that include meatpacking, but without sectorial disaggregation.

In the USA, for example, the incidence in manufacturing of injuries was 2.8% and of fatal accidents 0.0026% in 2022. In the EU, the incidence of non-fatal accidents in manufacturing was 1.8% in 2021,⁴¹ and for fatal accidents the incidence was 0.0016%.⁴² In food manufacturing in the EU the incidence of accidents was 2.5%, with a roughly similar figure to general manufacturing for fatal accidents.

Among the 21 broad economic activity clusters classified by Eurostat, manufacturing is the fifth most risky cluster in terms of the incidence of non-fatal accidents.⁴³ Out of the 112 more specific categories published, food manufacturing ranks twentieth.⁴⁴

In Brazil, government statistics for 2019 show that meatpacking workers suffered four times more from work-related accidents and 10 times more from occupational diseases than the average for the country's workers, but had 0.65 times fewer fatal accidents.^{45,46} Between 2012 and 2022, meatpacking ranked third highest among more than 670 categorised economic activities in Brazil in terms of the incidence of accidents.⁴⁷ In 2021, the national incidence of accidents in meatpacking was 3.25%,⁴⁸ and for fatal accidents the incidence was 0.0071%.⁴⁹

In Ireland, MRCI concluded that under-reporting caused the large discrepancies it found between the incidence of accidents its interviewees described and those that employers reported.⁵⁰

In 2022 and 2023 in Australia, Workplace Health and Safety Queensland (WHSQ) conducted a "campaign aimed to prevent and minimise the risk of injuries to workers in high-risk meat processing workplaces and increase industry compliance". WHSQ issued 142 enforcement actions for non-compliance in 48 meat-processing facilities inspected and issued two infringement notices fined at AU\$ 7,200 and four prohibition notices. Failure to adequately prevent risks related to equipment operation and falling were among the most frequently identified instances of non-compliance in Queensland.⁵¹

3. Brazil's beef industry

In this chapter we narrow the focus to look specifically at **beef meatpacking** in Brazil.

Credit: © Labour Prosecution Service



A pillar of the economy

Brazil's beef sector is a leading and growing industry nationally. In 2022, the industry generated US\$ 198 billion or 10% of Brazilian GDP.⁵² Based on figures for the five most recent years available, total industry revenue in US\$ grew by 29%, while industry growth in Brazilian real (R\$) amounted to 71%, reflecting the 26% depreciation of the R\$ against US\$ over the period.⁵³

Although total industry income grew vigorously, production stagnated between 2018 and 2022 at around 10.8 million units of carcass weight equivalent (CWE). In this period, the cattle population grew by 8.2%, while the number of cows slaughtered declined by 4.3% (Table 1). Industry estimates project production will increase by 18% in the next decade, mostly in response to growing domestic demand.⁵⁴

Table 1. Key economic figures on the Brazilian beef sector⁵⁵

Indicator	Unit	2018	2019	2020	2021	2022	2021 - 2022	2018 - 2022
Total income	US\$ billion	154.1	157.4	145.0	169.3	198.1	17%	29%
	R\$ billion	597.2	618.5	747.0	913.1	1,020.0	12%	71%
Production	Million carcass weight equivalent	10.8	10.4	9.8	9.7	10.8	11%	0.0%
Slaughtered	Million heads	44.2	43.3	41.5	39.1	42.3	8.2%	-4.3%
Herd	Million heads	187.5	188.9	190.8	196.5	202.8	3.2%	8.2%
Export	Million carcass weight equivalent	2.2	2.5	2.7	2.5	3.0	20%	36%
	US\$ billion	6.2	7.7	8.5	9.1	12.9	42%	108%
	R\$ billion	24.1	30.1	44.0	49.3	64.5	31%	168%
	volume %	20%	24%	28%	26%	28%	7.8%	36%
	US\$ value %	4.0%	4.9%	5.9%	5.4%	6.5%	21%	62%
	R\$ value %	4.0%	4.9%	5.9%	5.4%	6.3%	17%	57%
Meatpackers' income ⁵⁶	US\$ billion	37.3	36.6	34.7	40.8	48.6	19%	30%
	R\$ billion	144.9	143.9	179.0	220.1	250.6	14%	73%
Meatpackers' income share	US\$ billion	24%	23%	24%	24%	25%	1.8%	1.4%
	R\$ billion	24%	23%	24%	24%	25%	1.9%	1.3%

Exports

The recent growth of Brazil's beef exports by value has outpaced domestic industry growth. The value of exports amounted to US\$ 12.9 billion 2022, doubling since 2018 and increasing by 42% compared to 2021. Unlike overall production, exports also grew by 36% in volume (Table 1).

Exports have clearly become the industry's cash cow. The export share of total production by volume increased from 20% in 2018 to 28% in 2022. With an increase of 62%, the value share of exports of total beef industry income in US\$ was even more pronounced. Record exports by value have profited from international market prices for Brazilian beef, which have increased continuously since 2018 and especially between 2020 and 2022.⁵⁷

China is Brazil's largest beef export market, accounting for 55% of the country's exports by volume and 61% by value in 2022.⁵⁸ Brazil's other main beef export destinations in 2022 were the USA (6.9%) and the EU (5.1%).

Meatpackers' value share

Brazil's meatpacking businesses are responsible for about a quarter of the beef industry's value added. Since 2022, the meatpackers' share of total income has been second to that of retail only, overtaking cattle farmers.⁵⁹ Meatpackers' income from exports has also grown faster than that of the industry overall.

The cattle butcher kings

The successive revenue records broken by Brazil's beef industry are driven by three giants in the sector: JBS SA, Marfrig, and Minerva Foods. These three mega-sized meatpackers are among the 15 largest companies in Brazilian agribusiness and account for 42% of cattle slaughtered in the Amazon.^{60,61} In August 2023, Minerva announced the purchase of 16 Marfrig production units, including 11 plants in Brazil, bringing the company to a level of slaughter volume similar to that of JBS.^{62,63}

Loans from national and international banks and funds have enabled these companies to grow over the last two decades to become leading international actors. The World Bank's International Finance Corporation, for example, injected US\$ 85 million into Minerva in 2013.⁶⁴ Between 2002 and 2019, the Brazilian Development Bank (BNDES) issued more than R\$ 20 billion (at inflation-adjusted values) in loans to the three meat giants. R\$ 12 billion of this was for JBS, which has established itself as the world's largest meat producer and second largest food company.⁶⁵

JBS

With a history of almost 70 years, JBS is a Brazilian-based multinational, originally from the state of Goiás and now present in more than 20 countries. The company has the capacity to process 75,000 head of cattle per day at its facilities



across the globe. Considering only Brazil, the slaughter capacity of the 34 plants in operation was just over 32,000 head per day in 2022.⁶⁶ JBS's operations go beyond beef processing to include poultry, pork, and other meat byproducts.⁶⁷

Marfrig

Until August 2023, when it sold part of its assets to Minerva, Marfrig had a capacity of 30,100 head of cattle per day globally in 20 slaughterhouses.⁶⁸ Later in 2023, the company's website stated that its 16 Brazilian units can process 11,000 head of cattle per day.⁶⁹ Established in 2000,⁷⁰ Marfrig is the world's largest hamburger producer and supplies large fast-food chains such as McDonald's and Burger King.^{71,72} The company also operates outside Brazil and has diversified its production to include sheep meat and, more recently, vegetable protein.

Minerva

Founded in 1992 in São Paulo, Minerva claims to be the leading beef exporter in South America.⁷³ Its slaughtering capacity in Latin America is 30,740 head of cattle per day, of which 39.8% is located in Brazil (12,237 head per day).⁷⁴ It also operates in Argentina, Colombia, Paraguay, and Uruguay and has specialised lamb-processing plants in Australia.

Next to selling meat, the three beef giants are also active in byproduct segments of cattle slaughter and other sectors such as leather production and trade, hygiene and cleaning products, collagen, metal packaging, biodiesel, plant-based products, and pet food.⁷⁵

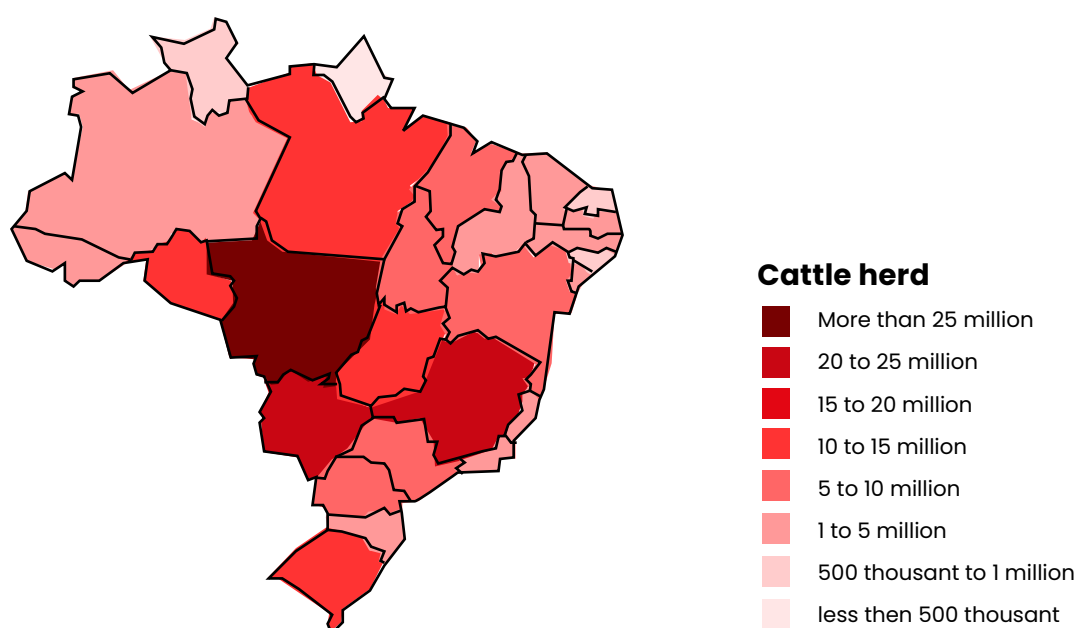
Deforestation, climate change, and slave labour

Brazil's meatpacking industry faces problematic issues in its domestic supply chain. Deforestation, greenhouse gas emissions in the form of methane that cattle belch, and slave labour are among the most pressing problems.

Deforestation

In 2021, Brazil's pasture area reached 163.1 million hectares. Five states accounted for more than half its cattle population: Mato Grosso (with 14.5%), followed by Minas Gerais, Mato Grosso do Sul, Goiás, and Pará.

Brazil's cattle population by state, 2021



Almost 100 million head, or 43% of Brazil's cattle population, graze in municipalities of the Legal Amazon, the nine states in the Amazon basin.⁷⁶ The advance of cattle over the largest tropical forest on the planet is a cause for concern, since cattle farming is the predominant cause of deforestation in Brazil and one of the main reasons for illegal forest clearance using fire.⁷⁷

São Félix do Xingu in Pará state is the municipality with the largest cattle population in the country and among the most deforested areas.⁷⁸ An estimated 90% of deforested areas in the Legal Amazon have become cattle pasture.⁷⁹

Climate change

The impacts of cattle farming go beyond the forest at ground level. In Brazil, deforestation is the main source of atmospheric carbon emissions.⁸⁰ Globally, the CO₂-equivalent emissions associated with agri-food production have increased

by 16% in the last 40 years.⁸¹ Brazil is the third largest emitter of greenhouse gases from agri-food systems behind China and India.

Around 32% of global human-induced methane emissions come from livestock, mainly from ruminant animals' digestion ('enteric fermentation') and manure management. Methane is a powerful greenhouse gas that accounts for about 0.5°C of the average annual temperature increase.⁸² Estimates of livestock's share of global greenhouse gas emissions range from 11% to 20%.⁸³

In 2021, Brazil was responsible for emissions of 2.4 billion tonnes of greenhouse gases, a 12% increase over 2020 and the country's largest increase in emissions in nearly two decades. In the farming sector, the increase was 4%, reaching 601 million tonnes of CO₂ equivalent, compared to 579 million tonnes in 2020.⁸⁴

Slave labour

Brazil's meat sector leads the national ranking of industries using slave labour. Since 1995, more than 16,600 workers have been rescued from modern slavery in cattle farming – 28% of the total number of slaves freed across all the country's industries in the period.⁸⁵ Of the 2,977 cases of slave labour the Brazilian authorities reported between 1996 and 2022, 35% were linked to the livestock sector.

In reality, the number of workers subjected to conditions analogous to slavery, including forced labour,⁸⁶ in this sector may be much higher. There are many indications that modern slavery exists on cattle farms in areas where no violations are reported.⁸⁷

Inspections and monitoring task forces are required to officially ascertain slave and forced labour, and these are often understaffed and lack resources.⁸⁸ Therefore, a lack of reports of modern slavery in certain states does not necessarily mean lower prevalence, but rather reflects limited monitoring and enforcement capacity.

The state of Rondônia, for example, hosts 11.57 million head or 5.7% of all Brazil's cattle, the seventh largest herd in the country.⁸⁹ Relatively few cases of modern slavery have been reported occurring in Rondônia compared to the national average. In 2022, only 31 workers were reported as freed from slavery in the state, out of a total of 2,577 workers reported freed in 26 states and the Federal District, or an average of about 95 cases per state.⁹⁰ By contrast, in Pará state, which has the country's fifth largest herd (16.80 million head), 92 workers were reported freed.



Box 5. Limited progress in addressing beef supply chain challenges

Alongside beef industry expansion, international pressure to clean up beef supply chains has intensified. In June 2023, for example, a new law banning imports of commodities associated with deforestation around the world, including beef, entered into force in the EU.⁹¹

More than 10 years ago, the main Brazilian meat-processing companies pledged to block purchases from farms involved in illegal deforestation in the Amazon.⁹² They also committed not to buy from farms operating in protected areas and on the so-called slave labour 'dirty list' – the federal government's list of companies and individuals convicted of modern slavery practices.⁹³

However, cattle tainted with illegal practices such as deforestation and slave labour continue to reach the meat companies' slaughterhouses:

- ▶ Both JBS and Marfrig have bought illegal cattle from the Apyterewa Indigenous Land in São Félix do Xingu municipality in Pará state.^{94,95} JBS claims it does not have enough data to comment on the case, while Marfrig says there were no restrictions on the farms at the time of its purchases in 2019.
- ▶ A Marfrig plant in Várzea Grande municipality, Mato Grosso state, bought hundreds of animals from a cattle rancher who had been fined twice for illegal deforestation.⁹⁶ The company says the farm complied with its policy at the time.
- ▶ A Minerva unit in Araguaína municipality, Tocantins state, slaughtered cattle from a property that bought animals from a farm on which slave labour was identified.⁹⁷ The company did not comment specifically on the case.

4. Accident factories

“These are accident factories” –

Marcos Cardoso dos Santos, president of the Union of Workers in the Food Industries of the State of Rondônia (SINTRA-INTRA)

This chapter describes **in some detail working conditions in Brazil’s beef industry**. It presents Repórter Brasil’s and SOMO’s research findings **on important aspects of workplace health and safety**. Results from interviews with workers and other stakeholders form the basis of the discussion of each topic.⁹⁸ We also include considerable contextualisation using statistics and other findings from our desk research.

FROM START TO FINISH
• MEAT PRODUCTION IN SLAUGHTERHOUSES •



• **SLAUGHTER**

• BLEEDING

• SKINNING

• EVISCERATION



• **CARCASS DIVISION**

• CLEANING

• CHILLING



• **DEBONING**



• **TRIMMING AND CUTTING**



• **PACKAGING AND STORAGE**

The problem with meatpacking

Brazil's meat supply chain is large and complex, with thousands of cattle farmers spread over several regions. Before ending their short lives in the slaughterhouse, cattle are often transferred several times between farms for fattening.

In the meatpacking factories, the cattle are slaughtered, eviscerated, deboned, cut into pieces, and packed (see Figure 1). The process repeats millions of times each year. Work in the factories is fast paced, exhausting, and often dangerous. In 2021, 39.1 million head of cattle were slaughtered and processed in Brazil by a workforce of 134,600.^{99,100}

Frantic work pace and related issues

The Brazilian cattle population jumped from 166.4 million in 2002 to 202.8 million in 2022.¹⁰¹ This growth has impacted on work at slaughter units. Interviewed employees stated that production is growing, and there is pressure to meet targets. The frantic work pace, ergonomic problems, noise, extreme temperatures, confined spaces without windows and with little ventilation, repetitive strain, psychological pressure, and harassment are a daily struggle for meatpacking workers.

Credit: © Isabel Harari/Repórter Brasil

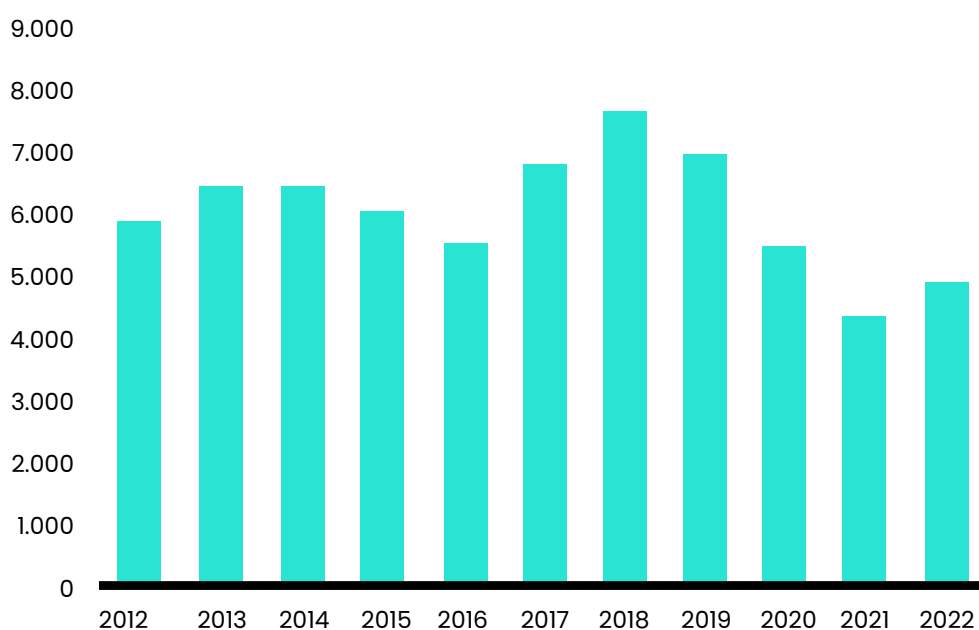


Accidents

In 2021, Brazil's Ministry of Social Security reported 4,853 accidents occurring during the slaughter of cattle.¹⁰² Only 10 other economic activity classifications in the country were associated with more reported accidents. The incidence rates were 3.6 non-fatal accidents per 100 workers and 9.7 fatal accidents per 100,000 workers. The most reported categories of accidents in meatpacking overall were cuts, lacerations, contused wounds (bruises) or open wounds (35%), and contusion and crushing (19%).^{103,104}

Figures 2 and 3 show the development of occupational injury rates in meatpacking plants since NR-36 came into force in 2013. The figures indicate that, after a few years of relative stability, the number of reported accidents increased in 2017–19 and declined after 2020 to reach the lowest levels in this period in 2021 and 2022.

Figure 2. Non-fatal accidents in Brazil's cattle slaughter sector, 2012–22¹⁰⁵

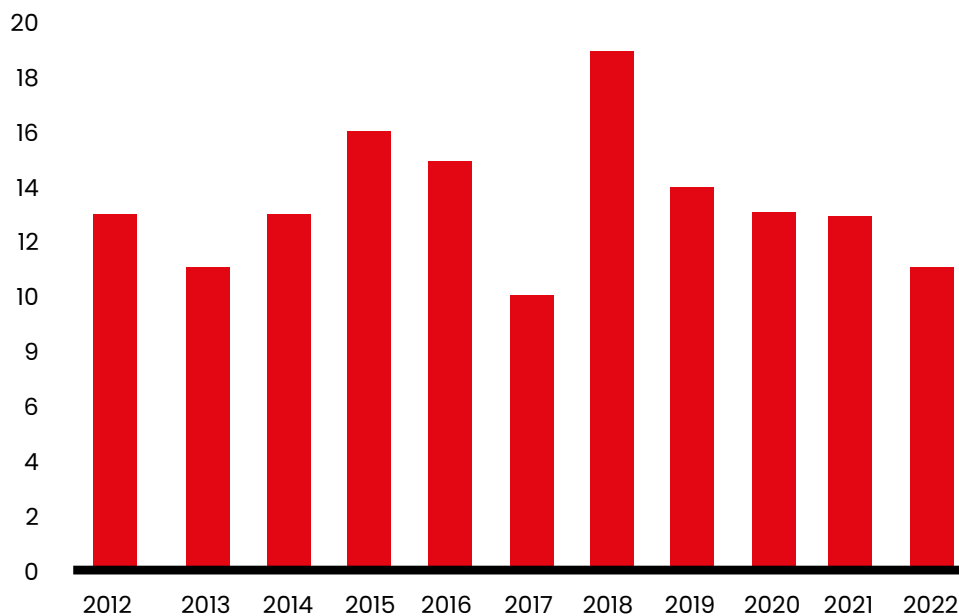


There is no official explanation for the recent declining trend in workplace accidents, but some sources suggest it relates to the number of inspections – which decreased in the years of the pandemic, resulting in fewer accidents reported – and improved compliance with the regulation.

Despite NR-36, our interview respondents report routine accidents including cuts on fingers, hands, arms, and mouths, machines hitting their feet or trapping their knees, reels falling, and knives and hooks hitting colleagues instead of cattle.

Between 2017 and 2022, the number of fatal accidents reported followed a similar pattern to that of accidents in general. Compared to the general number of accidents, however, the recent decline in fatalities was less pronounced compared to the period up to 2017 (Figure 3).

Figure 3. Fatal accidents in Brazil’s cattle slaughter sector, 2012–22¹⁰⁶



Social benefit (accident and sickness allowance)

In cases of work-related accidents or illness, companies are obliged to pay workers for a period of 15 days.¹⁰⁷ Thereafter, the federal government pays workers a social benefit.¹⁰⁸ For all sectors, expenditure on this accident and sickness allowance was R\$ 1.8 billion in 2021 accumulated costs since 2012 have reached R\$ 24.3 billion.¹⁰⁹

“The government is spending too much on this social benefit [accident and sickness allowance] and failing to invest in other policies such as income growth and distribution. A work accident is something that needs to be fought; it is interconnected with the underdevelopment of the nation” –

Justice Alberto Balazeiro, Superior Labour Court prosecutor

Causes of workplace injury

Excessive and uninterrupted use of certain joints can cause diseases such as repetitive strain injury and work-related musculoskeletal disorder (RSI/WMSD), including joint problems, nerve damage, arthritis, and arthrosis. Workers at meatpacking plants may perform up to 90 movements per minute, while doctors recommend a maximum of 30 to avoid occupational health issues.¹¹⁰

“It’s the machines that dictate the tempo,” one employee told us.

In the most serious cases, workers have to stop working altogether and have chronic health problems.

Roberto Ruiz, an occupational physician at the Federal University of Santa Catarina and a workers’ health consultant for the International Union of Food Workers, informed us:

“The work in meatpacking plants is very fast paced. Together with exposure to other risk factors such as cold and noise, the high tempo of repetitive movements leads to more accidents and health problems. In the cold chamber, for example, low temperatures and intense noise lead muscles to contract; repetition and fast paced movements are then more likely to cause health problems. If limits to work pace and load are not respected, people are more likely to get sick and have RSI and WMSD.”

Credit:© Isabel Harari/Repórter Brasil



Next to physical health issues, we also found a high incidence of psychosocial disorders such as depression, panic syndrome, burnout, and anxiety among workers.

“I got physically and mentally exhausted,” says a former meatpacking worker who quit his job because he could no longer stand the frantic pace of production.

The following sections consider in more detail key problems affecting beef industry workers.

Cold

It is common for meatpacking workers to be exposed to extreme temperatures, both in very cold environments such as cold chambers and in very hot places such as areas for cooking tripe. The Brazilian authorities document workplace temperature variations between 6°C and 42°C.¹¹¹ These large variations increase the incidence of health problems such as colds, bronchitis, pneumonia, and rhinitis. In addition, the cold can cause tissue and skin injuries.

“It’s both hot and cold, so there are always people with colds,” one employee reports.

Many workers wear sweaters under their uniforms to withstand the low temperatures, but even these will often not protect them from getting sick. Reports of influenza, sinusitis, coughs, shortness of breath, sore throat, and even face burns due to cold temperatures are common.

“Every month I stayed there [in the production sector] I had some infection because of the cold, especially in my throat,” says another employee.

Lack of personal protective equipment (PPE)

Intense cold may lead to disruption of body temperature regulation and other functions.¹¹² For this reason, activities that entail prolonged exposure to low temperatures are in principle designated as unhealthy, requiring employers to provide personal protective equipment (PPE) such as thermal garments, gloves, and special boots (see further discussion in section 4.11).

“Sometimes the laundry provides sweaters, but not always, and they don’t have enough for everyone,” said a worker we interviewed.

At Marfrig’s hamburger factory in Bataguassu, an employee said his hands get red and he feels pain when handling blocks of frozen meat, even when he wears gloves provided by the company. One of the employees said that he had been trying to have his damaged sweater replaced for more than two months: “It’s all torn, and it’s very cold.”

In reaction to the findings of this report, Marfrig responded¹¹³ that strict temperature control in the work environment is necessary to comply with sanitary requirements for handling animal products. The company said it provides employees with equipment and breaks so they are not indiscriminately exposed to low temperatures.



Credit: © Ministério Público do Trabalho

Thermal breaks

Marfrig’s statement further notes: “All employees exposed to temperatures below 12 degree Celsius are entitled to a 20-minute thermal break for every 100 minutes worked.”

A Ministry of Labour inspection at the Bataguassu plant in 2022 confirmed Marfrig’s claims.¹¹⁴ An earlier inspection in 2019, however, had noted that factory thermometers indicated temperatures higher than they really were, which prevented workers from taking breaks.¹¹⁵

Noise

“Noise kills; it causes trauma, amputation and electrocution,” says Professor Paulo Rogério Albuquerque de Oliveira of Brazil’s Social Security Resources Council.¹¹⁶ Professor Oliveira coordinates the graduate studies programme in Work Safety Engineering at Paulista University in the Federal District. His studies point to noise as one of the main causes of accidents in meatpacking plants, considering both its direct and indirect effects.

Noise and vibrations from machinery such as chainsaws used on the factory floor cause health problems. When noise is intense and exposure is continuous, structural changes occur in the inner ear and may result in hearing loss, tinnitus, and intolerance of intense sounds.

A worker reported: “I could not bear the noise; it kept buzzing in our ears afterwards” – even with proper PPE such as earmuffs and earplugs.

“There is a lot of noise from machines and people hitting the stainless-steel structures with boxes of frozen meat. It is unbearable,” observed another employee.



Credit: © Personal collection

Exposure to noise at high levels and for several hours a day causes irritability, loss of concentration, and reduced reflexes, all factors that make people prone to accidents.

“There is no way a person can go home healthy at the end of the day,” says Professor Oliveira.

Studies show that noise can cause stress as well as neurological, digestive, cardiovascular, and hormonal disorders.¹¹⁷

“Noise causes endocrine changes, systemic hypertension, erectile dysfunction, cortisone alteration, and changes in blood vessels. It destroys everything. And there is no personal protective equipment for that,” Professor Oliveira explains.

“Besides hearing loss, vascular alterations are already proven, which can lead to changes in blood pressure, dizziness, headache and malaise,” Dr Ruiz agrees.

Ammonia

“It’s like the gas chases you wherever you go”

– employee who experienced an ammonia leak at Marfrig’s unit in Bataguassu

Ammonia is used in refrigeration systems. At certain doses, exposure to ammonia causes breathing difficulties, burning of the nasal mucosa, pharynx, and larynx, chest pain, pulmonary oedema, nausea, vomiting, and mouth swelling.¹¹⁸ Ammonia intoxication can be fatal.

Between 2014 and 2020, at least 10 ammonia leakages were reported at JBS units in Brazil, with 316 workers affected.¹¹⁹ In 2021, after an ammonia accident at JBS, workers said they experienced panic attacks and anxiety.¹²⁰

“I have headaches, chest pains, shortness of breath, and my heart races. Some days I wake up with an excruciating headache. It’s really bad,” says a worker who suffered from ammonia intoxication at the JBS Pimenta Bueno plant. Being under 30, he says that his constant fatigue has prevented him from finding a job since he was eventually laid off from the meatpacking plant.

Dr Ruiz explains that it is well known that chronic exposure to ammonia can indeed cause chronic bronchitis, but there still is little research on the long-term health effects of acute and incidental exposure, as in this worker's case.¹²¹

Even so, Dr Ruiz does not rule out a relationship between health problems and incidental ammonia exposure:

“The consequences depend on the level of exposure that the person has suffered. There may be mild cases of sore throats or eyes or more serious cases such as pneumonitis, a lung inflammation that, depending on the degree, may become perennial. He didn't die, but he got sick, went to the hospital and then went back to work. What would be the chronic sequelae of that acute exposure? We need to study it further.”

Gendered health problems

Data from Brazil's National Institute of Social Security (INSS) show a high incidence of pregnancy problems at meatpacking plants.¹²² Compared to other industries, the risk of 'maternal health problems' for slaughterhouse employees was 34% higher than in other sectors. These disorders include infections, haemorrhaging, and excessive vomiting, among other pregnancy complications.

It is not known whether there is a causal relation between these pregnancy issues and meatpacking work in Brazil. However, specialist doctors believe that micro-leaks of ammonia, bad posture at workstations, and exposure to low temperatures and microbiological agents present in animal meat can affect female workers' health.¹²³

The need to spend a large proportion of work time standing has the potential to trigger thrombosis and embolisms. Noise can aggravate nausea and dizziness. And restricted toilet use increases the risk of urinary tract infection – a leading cause of premature birth and neonatal intensive care unit admission.¹²⁴

“I've had urinary infections two or three times,” says a JBS employee in Rondônia. She claims that, to use the toilet, the women had to wait for the breaks allowed by the company.

This is not an isolated case. Workers interviewed at Marfrig in Bataguassu report they often complain about not being able to use the toilet when they need and ending up with urinary infections.

In response to these findings, JBS and Marfrig deny their employees are subject to toilet restrictions. “JBS guarantees free access to toilets and drinking fountains throughout the workday,” claims the world's largest meat producer. Marfrig sustains that “regardless of mandatory breaks, all workers can leave their workstations at any time to use the toilets”.

COVID-19

During the Covid-19 pandemic, the Brazilian government declared meatpacking an essential activity, thereby ensuring it was unaffected by lockdown measures. In this context, meatpacking plants became vectors of Covid-19 contamination, increasing the number of infections in areas of operation.

In 2020, for example, the meatpacking plant of JBS's poultry division Seara was deemed to be at the origin of spread of coronavirus infections among the Kaiowa and Guarani Indigenous peoples who live in the Dourados reserve, Mato Grosso do Sul.¹²⁵ Infections among the Avá-Guarani people of the Oco'y Indigenous Land in São Miguel do Iguaçú, Paraná state, were also found to be related to outbreaks in a local meatpacking plant.¹²⁶

When considering all operations – including beef, poultry, fish, and pork – the number of officially recorded accidents in meat processing remained stable between 2018 and 2020. In 2020 however, the main cause of illnesses changed from repetitive movements to “contact with sick people”, and the body part most frequently affected was the respiratory system in 70% of cases of illness. In 2018 and 2019, before the Covid-19 pandemic, the respiratory system did not appear at all in the list of the most frequent occurrences.¹²⁷

Pandemic work

In 2021, a first-level court fined the JBS unit in São Miguel do Guaporé R\$ 20 million as a result of “the company’s neglect in proceeding with the immediate withdrawal of employees from work when they showed potential symptoms of Covid-19.”¹²⁸ This was the first conviction of a large meatpacking plant for lack of control of the pandemic.¹²⁹ The court decision rested on the fact that the company had exposed workers to the virus without proper social distancing or PPE.

An employee who was infected twice told Repórter Brasil researchers: “They said it was dengue fever ... the foreman even said it was in our heads, that it was psychological.” As those dismissed were not replaced, employees who continued working had to work harder to keep up with production: “It was terrible. Those who stayed had to work twice as hard ... in a sector of 200 people, 20 would fall sick, but they wouldn’t stop slaughtering cattle, so the work pace increased,” the worker recalled.

“There was no way to do the distancing,”

another employee at the São Miguel do Guaporé JBS plant complained.

In reaction, JBS stresses that it adopted several measures to prevent the spread of the coronavirus at its units, including the promotion of safe distancing such as by demarcating spaces at units, controlling access to environments prone to crowding, and doubling the fleet of charter buses. The company also says it encouraged vaccination against Covid-19, removed employees from risk groups, and invested in sanitising and disinfecting common areas.

While national emergency measures for Covid-19 ended in May 2023,¹³⁰ Dr Ruiz is still concerned and considers it necessary to look beyond the pandemic: “We must be very alert. Meatpacking plants are potential reservoirs for the expansion of other viruses or new Covid mutations.”

Several factors in meatpacking, including enclosed workplaces and proximity between humans and animals, facilitate conditions for new viruses and bacteria to emerge.¹³¹

Working silently in pain

“What is the use of complaining of pain? You just hold the knife in pain, there’s no choice”.

“We worked sick. I worked every day when I had dengue fever.”

Testimonies collected for this report show it is not unusual for employees to work with pain, mumps, dengue fever, high blood pressure, shortness of breath, and muscle weakness after being intoxicated by ammonia.

One worker interviewed explained: “When I cut my finger, I didn’t tell anyone about it. I just put on my gloves again and went back to work.” She later had to get her wound stitched.

There are several reasons why employees will not report pain or illness to the company management. First, absence may reduce the individual’s monthly income, since wages include an attendance bonus. Second, many workers fear not having enough income to get by, because Brazil’s social security service is notoriously slow in paying benefits and processing dismissals. As one respondent put it: “How can you complain [of pain] if they take three months [to pay benefits]?” A worker whose knee was injured in an accident had to rely on support from the local union and his colleagues to buy food: “Red tape was crazy.”

Another reason is fear of retaliation. Workers fear being fired for ‘just cause’ – that is, when the company claims to have reasons apparently unconnected with the illness to dismiss an employee. “If you complain, you’re out,” said one worker. “When you are healthy, the company wants you; when you have a problem, you’re done,” another told us. “If you don’t deliver, you’re no good, you’re no longer valuable,” said a third. This is why older workers often tell new recruits they will get used to pain.

The chief prosecutor of the Labour Prosecution Service in Rondônia state, Carlos Alberto Lopes de Oliveira, confirms: “Employees are convinced that reporting sick means losing their jobs. People often take painkillers to mask latent work-related illnesses, which could create much more serious problems for them in the future. It’s the worker who will end up paying that price.”



Dr Ruiz agrees with the above assessment:

“We have cases, and they are not few, of disability retirement. Because even if employees keep working in pain for a while, that pain will get worse and worse, and there will come a time when even if they don’t want to leave, they won’t be able to stay. Their bodies will no longer respond, their hands won’t have the strength or skill to keep working.”

Because they feel insecure about telling the company about their pain, many employees turn to their colleagues for help instead. An employee at Marfrig told us:

“Sometimes I’d tell my friend who worked next to me that I was sick, then she’d do my job and hers, pulling as much meat as she could from the machine. To manage we need to help each other. That’s how we do things there. Friends look after each other.”

A number of workers reported bad experiences when asking their employer for help. In some cases, doctors at production units did not take complaints seriously. “The [company’s] physiotherapist said it was a day’s pain, because production was heavy, that it would get better the next day,” said a worker who sought treatment for shoulder pain. Other employees claimed that supervisors disassociated the causal connection between work and illness, saying that certain injuries happened outside the company’s premises.

Under-reporting

In Brazil, when there is a work accident, companies must report it to the authorities by the next day. Fatal accidents must be reported immediately.

In theory, work accident reports or CATs (the Portuguese acronym for *comunicação de acidente de trabalho*)¹³² should be issued when there is mere suspicion that an event – whether illness or an accident with machinery – is work related.¹³³ In practice, however, many work-related health issues go unreported. In 2022, 115,954 of the 612,920 cases of work-related accidents in all sectors in Brazil that led to social security leave went unreported – a 19% under-reporting rate.¹³⁴ This estimate is based on the number of social security benefit claims. The government registers these demands to pay social benefits to victims, and many benefits are paid without mandatory CATs.

“Land of under-reporting”

“The failure to report work accidents is a historical problem. Brazil is known as the ‘land of under-reporting’ and the country has struggled against it for over 30 years. This is a fight we still need to win. Under-reporting exists, unfortunately, and it harms people,” says Dr Ruiz.

According to Supreme Labour Court Judge Balazeiro:

“Under-reporting is a major concern for those who deal with health and safety because it results in inadequately funded public policies. I can’t plan to combat an occupational disease or an accident at work if I can’t measure the incidence of that disease or accident. Under-reporting prevents public policies from reaching their targets.”

Judge Balazeiro continues:

“The other concern with under-reporting is avoidance of corporate accountability. When you fail to report, the aim is not to acknowledge the work accident and therefore not to be held accountable for the resulting illness. CATs, like work contracts, are basic elements of doing business. Whoever doesn’t issue the CAT will hardly respect other rights and norms.”

Prosecutor Oliveira explains there is also another reason for under-reporting: “Sometimes they [companies] deliberately fail to issue CATs so as not to increase their accident rates and the government contributions [companies must make] that increase proportionally to the [number of] CATs issued.”

A Marfrig worker, who was on sick leave when interviewed, said: “I was already on leave when I heard from the health and safety officer that the company was not issuing CATs for the type of illness I had. But it’s not just some illness, it’s a work-related illness. Or do only accidents with knives result in CATs?”

Misleading inspections

To check that working conditions comply with the legal requirements, the Brazilian authorities regularly inspect meatpacking plants. Respondents told us that during these inspections companies often go to great lengths to conceal the day-to-day workplace reality to mislead inspectors.

Workers told us:

“Inspection day is wonderful, it even makes you sleepy.”

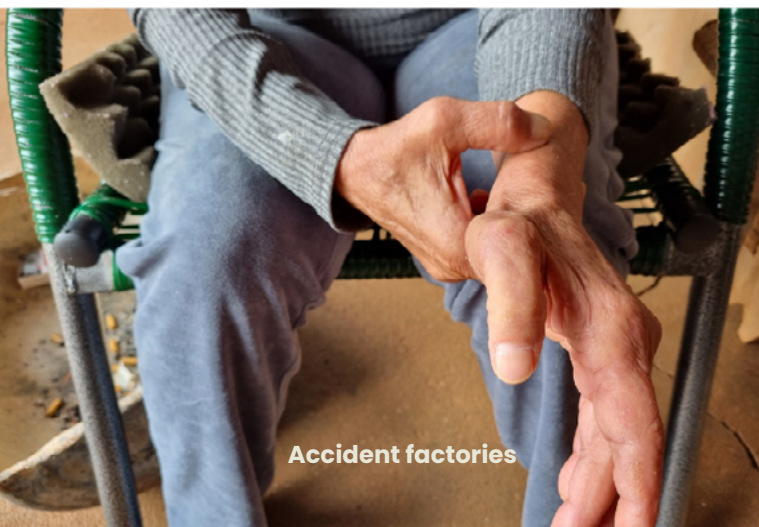
“One animal passes per minute [on the treadmill].”

“They switch on the exhaust before [the inspection] to raise the temperature [in the workplace].”

“Afterwards, the pace gets even faster to make up for lost time.”



Credit:© Isabel Harari/Repórter Brasil



Accident factories

However, when we presented the companies with the evidence, they denied any wrongdoing. Marfrig said the allegations were untrue and that its production pace, noise level, and temperature comply with official specifications for meat-packing production. It added: “[I]nspections by authorities and corporate clients usually continue for several days, which refutes the allegation of temporary changes.”

JBS did not comment on this issue specifically but claims it “complies with the rules provided for in current civil and labour legislation” and that “all facilities are always available to inspection agencies, in compliance with article 157 of the CLT [Brazilian labour legislation]”.

Two inspectors involved in monitoring occupational health and safety conditions in meatpacking interviewed for this research on condition of anonymity confirmed the workers’ statements about inspection fraud. One said: “On inspection days, work is a bed of roses. But if we just turn our backs, the massacre starts again.” Both inspectors favour unannounced inspections instead of the current practice of regular pre-announced inspection, to make implementation of NR-36 more effective.

Compliance failure

“I have no doubt that Regulation 36 has prevented thousands of accidents, mutilations, and deaths inside meatpacking plants,” said Artur Bueno, president of the National Confederation of Food Workers, at an event marking 10 years of the standard.¹³⁵

NR-36 is indeed considered crucial for promoting proper working conditions, but even official statistics show it still has a long way to go to be effectively implemented. From 2017 to 2020, of 1,437 slaughter plants audited, 917 (64%) were fined for not complying with the regulation.¹³⁶

From 2017 to 2020, of 1,437 meat-processing slaughter plants audited, 917 (64%) were fined for not complying with the regulation

Attempts to weaken labour standards

There have been attempts to weaken NR-36 such as those initiated in 2020 by the government of former president Jair Bolsonaro, including provisions to make the break regime less stringent. The Brazilian press reported that entities representing the big meat companies supported measures to undermine the health and safety regulation.¹³⁷ Public authorities involved in promoting labour rights warned such changes would pose a risk to workers.¹³⁸

Several labour prosecutors have pointed out that the two years of the pandemic have resulted in fewer government inspections of meat-processing plants.¹³⁹ Inspections were hampered by a lack of resources and operational difficulties when

“the ministry itself ceased to exist for 2 years and 7 months”, they said, referring to the abolition of the Ministry of Labour and the transfer of its responsibilities to the Ministry of Economy during the Bolsonaro administration.¹⁴⁰

In January 2022, a court injunction granted to the Labour Prosecution Service suspended revision of the NR-36 standard.¹⁴¹ The Prosecution Service pointed to two conditions that had not been met: prior consultation with Indigenous populations and a government report justifying the need for revision.

“NR-36 provides safety to workers in the meatpacking sector, so we want it to continue. This is not the time for discussing any change,” observes Artur Bueno of the National Confederation of Workers in Food and Related Industries, which brings together unions from several parts of the country.

Dr Ruiz comments: “If there were to be any revision of the regulation, it should be to improve it, to reduce working hours at meatpacking plants, focusing on promoting health.”

Corporate lobbying against ‘unhealthy’ designation

Trade unions throughout Brazil are filing lawsuits to guarantee workers monetary benefits that meat companies have not paid. One example is the mandatory premium for work officially designated as unhealthy. The unions argue this is the case for meatpacking because of exposure to low temperatures and high noise levels. As a consequence, they demand workers receive health hazard premiums ranging from 10% to 40% of the regional minimum wage.¹⁴²

Meat companies go to great lengths to prevent the authorities labelling their activities as unhealthy.¹⁴³ One reason is that workers employed in unhealthy environments are entitled to early retirement.¹⁴⁴ Another is that overtime is not allowed at workplaces recognised as unhealthy unless it is authorised by the Ministry of Labour and Employment¹⁴⁵ or by collective agreements.

However, the meat companies are not always successful in positioning their work as regular rather than unhealthy. In Mato Grosso state, for instance, an injunction prohibited JBS from demanding overtime from its employees.¹⁴⁶ And in the same state, Minerva was ordered to pay R\$ 500,000 for requiring overtime at its meat units.¹⁴⁷

Oppression and retaliation

In Rondônia, JBS workers and the Union of Workers in the Food Industries of the State of Rondônia (known in Brazil by the acronym SINTRA-INTRA) filed a class action lawsuit demanding payment of the health hazard premium. The company used ‘just cause’ to fire the employees who filed the lawsuit.¹⁴⁸

“One employee had worked at the company for eight years, never missed a day, never took sick leave, always did things right, one of the best de-boners they had. When he returned from vacation, they fired him,” said SINTRA-INTRA president Marcos Cardoso dos Santos.

One source said that, by dismissing the workers who filed the lawsuit, JBS had established a situation of persecution and “eliminating any possibility for workers to claim their rights”.

According to union president Santos: “JBS threatened workers to drop the lawsuit. First they fired one employee, then two, then 10, and for what? To coerce other workers to drop it. Workers get scared [to go to the union].” Santos said some workers sent letters to the union to withdraw their support for the case.

The Regional Labour Court made a favourable decision for the workers, but a federal court subsequently reversed the decision.^{149,150} Following this, Judge Carlos Antônio Chagas Júnior issued a new ruling in favour of the union and mentioning the threats against employees,¹⁵¹ citing “Notorious disregard for the labour law system and especially for the dignity of workers, who live in fear and anguish of losing their main source of subsistence.”

JBS declined to comment on the case, arguing that the proceedings have not yet concluded.

Credit:© Isabel Harari/Repórter Brasil



5. Reports from the factory floor

“Meatpacking is terrible; it’s pressure from all sides. People can’t take it anymore” –

SINTRA-INTRA president Marcos Cardoso dos Santos

This chapter focuses **on the findings of Repórter Brasil’s worker interviews** about how the factors **affecting workplace health and safety play out** in some of Brazil’s largest meat companies.

Aggregated interview results

We present here the main results of our interviews with current and former employees of JBS, Marfrig, and Distriboi in Rondônia and Mato Grosso do Sul states (details in Boxes 1 and 2) (Table 2).

The interviews show a high incidence of work-related health problems, with 84% of respondents reporting injuries and illness. Workers mostly reported having injuries or pain in the joints, ligaments, muscles, nerves, and tendons. The number of respondents having suffered some kind of accident (40%) was also substantial. Mandatory work breaks, intended to keep the pace of work relatively manageable, were more often than not ignored.

Overtime work (87%) and thermal discomfort (93%) were both structural aspects of the job. About two-thirds of workers reported experiencing ammonia leaks, and more than a quarter claimed they were not provided with adequate PPE. Workers also complained of workplace harassment and noise.

Table 2. Overview of main interview results

Of the workers interviewed:

84% ▶ reported work-related health problems	87% ▶ worked overtime
40% ▶ had suffered a workplace accident	26% ▶ reported not receiving adequate PPE
65% ▶ had experienced ammonia leaks	93% ▶ reported periodic thermal discomfort
52% ▶ did not take breaks as required by law	32% ▶ earned the minimum wage or less
79% ▶ had never done workplace exercises	

As for wages, 32% of the employees interviewed reported earning R\$ 1,320 per month –Brazil’s minimum wage for 2023 – or less.¹⁵² According to Brazil’s Inter-Union Department of Statistics and Socioeconomic Studies (DIEESE), the real wage needed to live with dignity in the country would have been just over R\$ 6,676 per month in 2023.¹⁵³

General issues at JBS plants in Rondônia

JBS has four slaughter plants in Rondônia: in Vilhena, São Miguel do Guaporé, Pimenta Bueno, and Porto Velho. We undertook interviews with 32 current and former workers at the first three of these factories. Many workers reported experiencing fear, accidents, and pain at the workplace (Table 3).

The most striking differences between the JBS worker findings and the overall aggregated survey results above are the relatively high percentage of ammonia leaks and the proportion receiving adequate PPE. Workplace exercise, a legal measure to improve workplace health and safety alongside frequent mandatory breaks, were even less part of the daily routine than breaks.

Table 3. Overview of interview results, JBS Rondônia

Of the workers interviewed:

84% ▶ reported work-related health problems	81% ▶ had never done workplace exercises
44% ▶ had suffered a workplace accident	97% ▶ worked overtime
78% ▶ had experienced ammonia leaks	8% ▶ reported not receiving adequate PPE
46% ▶ reported always taking breaks as required by law; 25% said they often took breaks; 13% rarely took breaks; and 16% never took breaks	93% ▶ reported periodic thermal discomfort

Lack of labour inspectors

In 2022, 7% of all cattle slaughtered in Brazil were slaughtered in Rondônia, making it the country’s seventh most important state for this type of activity. And the number of animals slaughtered grew faster in Rondônia than in all other states in 2023 up to the third quarter.¹⁵⁴ For a state with a relatively high level of meat processing, Rondônia has few labour inspectors: only 11, the fourth lowest number in the country, ranking it 24th.¹⁵⁵

History of labour rights violations

The JBS plants in Rondônia have a track record of labour rights violations. We previously mentioned (in section 4.6) the 2021 court-imposed fine of R\$ 20 million for the São Miguel do Guaporé unit’s “neglect in proceeding with the immediate withdrawal of employees from work when they showed potential symptoms of Covid-19”.¹⁵⁶

Also in 2021, 25 workers at the Pimenta Bueno unit were intoxicated by an ammonia leak, for which the workers sought compensation.¹⁵⁷

Older cases include one from 2014 in which employees in São Miguel do Guaporé went on strike over problems with safety and time registration, as well as to claim improved wages and benefits in line with other plants in the state.¹⁵⁸ At the time, the workers’ union complained that JBS was violating the right to strike, coercing workers to return to work, and hiring replacements or relocating labour from other units to meet demand. In 2013, JBS’s Vilhena unit had been ordered to pay R\$ 3 million as compensation for the damage to workers’ entitlements.

According to the Labour Prosecution Service’s analysis in 2023, JBS’s Porto Velho and Vilhena plants had failed to present evidence that they comply with workplace health and safety norms such as temperature limits, control of breaks, thermal and acoustic comfort in rest areas, and productivity parameters compatible with the capacity of each worker.¹⁵⁹ Consequently, the labour prosecutor imposed a R\$ 2 million fine on the company.

The labour prosecutor in charge of this case, Carlos Alberto Lopes de Oliveira, said to Repórter Brasil that “meatpacking plants are, in fact, resisting the enforcement of measures that directly impact costs and production, such as the size of the workforce and legal breaks”.

JBS offered no detailed comment in response to our account of the above case. The company stated only that the case “precedes the coming into force of NR-36” and that “There is no report indicating non-compliance with the standards in force.”

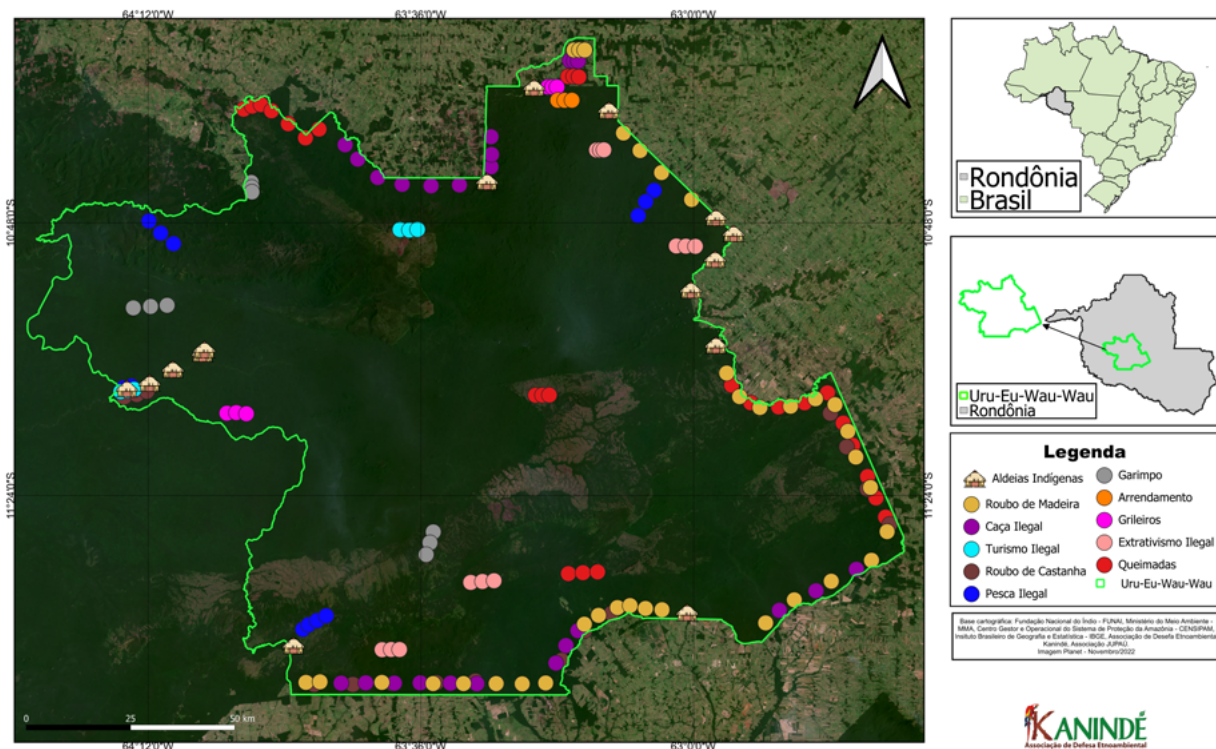
However, the case has continued to progress, with the Labour Prosecution Service’s petitioning of the courts in 2023 to recognise the company as not fully complying with its duties towards workers.

Illegal farms supplying JBS and grazing the forest

Located on the new deforestation frontier, Rondônia ranks second among Brazil’s Amazonian states for recent losses of protected areas.¹⁶⁰ In 2022, Center for Climate Crime Analysis showed that JBS plants in Rondônia buy meat from illegal farms located inside the Uru-Eu-Wau-Wau Indigenous Land.¹⁶¹

According to the investigation, more than 25,000 cattle head illegally grazed on the Indigenous land, which has to date lost 13,000 hectares of forest to livestock. JBS responded by saying that, due to the lack of clarity about the properties named in the report, “it is not possible to move forward in a detailed analysis” of the supply chain.

Pressure on the Uru-Eu-Wau-Wau Indigenous Land, Rondônia state



The growth of cattle farming increases pressure on Indigenous peoples' territory and creates internal problems within the communities. Forest-to-pasture conversions are often associated with landgrabbing, timber theft, and illegal hunting.

Almir Suruí, an Indigenous peoples' leader in the region, denounces the leasing of pastures inside Indigenous lands:

“Pasture establishments increased a lot during the previous government because they created expectations that agribusiness could take over Indigenous lands. There were large investments by cattle ranchers and agribusinesses and there was even legal advice for farmers for legalising these pastures. The main objective was to revoke Indigenous peoples' right to the territories so that they could occupy them.”

Since 2009, meat companies in Brazil have been required to monitor their entire supply chain to prevent deforestation and slave labour, including intermediary farms through which the cattle they buy pass, but the companies have so far failed to comply. Consequently, the industry continues to process animals raised in the Uru-Eu-Wau-Wau territory and other protected areas of the state.

Meat from illegal farms in Rondônia has ended up on the shelves of large supermarket chains operating in Brazil, such as Carrefour and Casino.^{162,163} A Repórter Brasil survey showed that, even after reports led Carrefour to ban meat from specific JBS plants it continued to stock this illegal meat.¹⁶⁴

JBS admitted in 2022 that its plants in Rondônia sourced thousands of cattle head from embargoed farms and from farms with histories of illegal deforestation and slave labour run by a gang of deforesters.¹⁶⁵ The cattle were processed between 2018 and 2022, with the meat sold in Brazil under the company's brands and possibly also exported.

According to international trade data, between 2018 and 2022, the USA imported 12,389 tonnes of JBS beef from the three municipalities where the plants involved in the illegal activity are located (Porto Velho, Vilhena, and São Miguel do Guaporé). Only Hong Kong and Egypt bought more JBS beef from these units during that period.

Issues at individual JBS plants: Vilhena, São Miguel do Guaporé, and Pimenta Bueno

We turn now from general concerns arising at JBS's units in Rondônia to site-specific findings from interviews with current and former JBS workers in Vilhena, São Miguel do Guaporé, and Pimenta Bueno.

JBS Vilhena

“I’m in pain all the time,” one of the workers at JBS in Vilhena told us. After three years of employment at this plant, he was home on sick leave. He took different painkillers for his back, shoulders, and arms, and needed physiotherapy for these problems.

Another employee said he had once cut his hand with a knife and another time was hit by a piece of equipment that fell on his head. However, he had not been granted medical leave.

Table 4 summarises key results from the interviews with 11 workers at the JBS Vilhena unit.

Table 4. Overview of interview results, JBS Vilhena

Of the workers interviewed:

73% ▶ reported work-related health problems	91% ▶ worked overtime
36% ▶ had suffered a workplace accident	100% ▶ reported receiving adequate PPE
81% ▶ had experienced ammonia leaks	100% ▶ reported periodic thermal discomfort
37% ▶ did not take breaks as required by law	

Credit:© Isabel Harari/Repórter Brasil



A whitish scar surrounds the hand and wrist of a former JBS Vilhena employee. The mark is old, but it still has itches and bothers the worker, who said it started with a small cut while working at the company’s plant. Years later, he was diagnosed with chromomycosis, a subcutaneous infection. The injury had allowed a fungus to proliferate, explained Dr Ruiz of the Federal University of Santa Catarina: “There should be more supervision to prevent this from happening, because [with the cut] the gateway was opened not only for the fungus but also for bacteria and other infections.”

While most workers said JBS allows breaks in accordance with the legislation, some pointed out that this is not always observed. “If you still have targets to meet, you won’t take a break,” explained one worker.

Workers also reported that the company is hostile towards trade unions: “They don’t like them, they don’t respect them, they don’t see them as a friends”; “If they see them talking, they want to know what it is.”

We experienced this type of hostility first-hand when the team started interviewing workers in front of the Vilhena plant, as suggested by the local trade union. When the company became aware of these interviews, its human resources department officers came from the plant to be present alongside the interviewers, union leaders, and workers. This appears to have been the company’s deliberate attempt to prevent workers from giving interviews or speaking freely.

At the end of March 2023, the JBS Vilhena unit was authorised to export beef to China.¹⁶⁶ This was the first licence the Chinese authorities had issued since 2019. The president of the local union, Marcos Santos, said that the new business had resulted in an even heavier workload.

JBS São Miguel do Guaporé

“At first they said it was dengue fever and told us to keep working, but it was Covid-19,” said an JBS employee in São Miguel do Guaporé, as if the disease caused by the dengue mosquito were not serious enough. At the height of the pandemic, he said, the unit’s managers forced employees reporting Covid-19 symptoms to continue working.

As noted above, the São Miguel do Guaporé unit was later fined for “neglect in proceeding with the immediate withdrawal of employees from work when they showed potential symptoms of Covid-19.”¹⁶⁷ JBS’s São Miguel do Guaporé unit was the first large meatpacking plant convicted in Brazil for failing to control the spread of the pandemic.¹⁶⁸

“Where did it hurt? Well, where it still hurts, because it still does,” a respondent said, referring to the shoulder pain that prevented her from picking up the meat passing on the conveyor belt. She blamed her work at the plant for her condition. When she had tried to make an appointment for an MRI scan, the company told her she was fired. Her dismissal occurred without the company acknowledging her injury as a work-related illness. Instead JBS stated her dismissal was for ‘just cause’.

Table 5. Overview of interview results, JBS São Miguel do Guaporé.

Of the workers interviewed:	
92% ▶ reported work- related health problems	92% ▶ worked overtime
42% ▶ had suffered a workplace accident	100% ▶ reported receiving adequate PPE
67% ▶ had experienced ammonia leaks	100% ▶ reported periodic thermal discomfort
59% ▶ did not take breaks as required by law	

JBS Pimenta Bueno

An employee who had experienced an ammonia leak at the JBS unit in Pimenta Bueno in 2021 told us:

“There was this loud bang and I saw everyone screaming, running, everyone falling over the chairs, trying to get away. And that strong smell entering my throat. I drank some water and went outside, but I couldn’t breathe properly. It started to block my throat, which began to close, and I woke up in the hospital. It was the worst experience of my life.”

The worker had stayed in the hospital for over a week and at the time of the interview still suffered from shortness of breath, high blood pressure, muscle weakness, and pain. “Out of nowhere, my heart speeds up; some days I wake up with a splitting headache,” he said.

At least 25 employees had been intoxicated¹⁶⁹ by ammonia in this same accident at JBS Pimenta Bueno in 2021. Some of these workers reported suffering from panic attacks and anxiety. The victims had sought court compensation of R\$ 28 million for ‘collective moral damage’ (*dano moral coletivo*).¹⁷⁰

A very young employee was experiencing the aftereffects of intoxication: “I feel constant fatigue and weakness in my bones. I didn’t have these problems before the leak; I’d never been to a hospital and I took no medicine. And now I must take medication and do tests.”

JBS Pimenta Bueno interviewees frequently reported pain in the arms and shoulders, inflamed tendons, and bursitis. One employee said his little finger had been cut off in a workplace accident involving a saw.

Table 6: Overview of interview results, JBS Pimenta Bueno

Of the workers interviewed:

89% ▶ reported work-related health problems	100% ▶ worked overtime
56% ▶ had suffered a workplace accidents	22% ▶ reported not receiving adequate PPE
89% ▶ had experienced ammonia leaks	88% ▶ reported periodic thermal discomfort
67% ▶ did not take breaks as required by law	

Most workers at JBS Pimenta Bueno said adequate PPE was always provided. However, some indicated it might take time for PPE to be available following a request and the PPE was of low quality.

The Testimonies at this plant also pointed to a tense work environment, and some reported a degree of company hostility to union activities:

“The workers have no voice; we can’t question anything, there is a lot of retaliation.”

“They don’t think [trade union activity] is good; they get on our nerves, but they don’t intervene.”

Marfrig in Mato Grosso do Sul

In August 2022, Marfrig opened the world’s largest hamburger factory in Bataguassu, Mato Grosso do Sul.¹⁷¹ We undertook most interviews (17) at Marfrig’s regular slaughterhouse in the city, one of first the company had acquired.¹⁷² A year later, Minerva announced it had taken over the unit.¹⁷³

Table 7 presents the key results from 22 interviews with workers at Marfrig’s slaughterhouse and hamburger processing unit in Bataguassu.¹⁷⁴

Table 7. Overview of interview findings, Marfrig Bataguassu

Of the workers interviewed:

95% ▶ reported work-related health problems	73% ▶ worked overtime
36% ▶ had suffered a workplace accident	32% ▶ reported not having adequate PPE
59% ▶ had experienced ammonia leaks	95% ▶ reported periodic thermal discomfort
36% ▶ did not (always) take breaks as required by law	

Marfrig burgers for McDonald’s

Marfrig’s units supply large fast-food chains such as McDonald’s and Burger King in Brazil. Ten Brazilian units are certified to supply meat to McDonald’s, one specifically for hamburgers.¹⁷⁵

Workers at the hamburger plant in Bataguassu reported McDonald’s officials visiting the facilities almost every month. One employee said: “They [McDonald’s] have hinted that they prioritise employees, but Marfrig doesn’t. They [Marfrig] get anxious when inspectors come because they ask many questions. The supervisor stands next to workers. Who would speak out in a situation like that?”

In response to these and other findings, McDonald’s told us it “verifies compliance with the highest standards of compliance, human rights and quality throughout its supply chain”; it has requested “clarification from the supplier on the issues raised by the report”.

Painful routines

Fast work pace, cuts on fingers and hands, back pain, extremely low temperatures, anxiety, and depression are part of the daily routine of Marfrig's employees.

"The work is very busy; some days I'd take off my uniform and everything is sore and burning," one worker told us.

Another said she had to keep working, even when she was crying with pain, and sometimes performed tasks that were not in her job description. On sick leave for four months with anxiety and depression, she said that, after collapsing inside the plant and on returning later to collect her belongings, she had been forced to work: "It's a lot of pressure and it is going very fast. I was crying with pain, but yet they put me to work."

Labour prosecutor confirms problems

Marfrig denied to us that it had any workplace problems: "The statements about psychological pressure, fast work pace and accidents at work do not reflect reality ... Employees' activities are carried out within legal safety, ergonomics and health standards, without fast work pace, targets set or imposed, or strenuous working hours."

However, an inspection by the Labour Prosecution Service in November 2022 found irregularities concerning ergonomics, PPE availability, and protective measures for handling machinery.¹⁷⁶ "Working at meatpacking plants exposes workers to high risks, compromising their health and safety. Marfrig in Bataguassu has not been adopting sufficient measures to reduce and/or eliminate the risks," the inspection report concluded.¹⁷⁷

An earlier Labour Prosecution Service inspection conducted at the older of the two Bataguassu plants, the slaughterhouse, in 2019 had "found situations of serious and imminent risk, endangering people's physical integrity, health and lives".¹⁷⁸ The agency found that, between 2018 and 2019, a "very high" number of more than 1,500 medical reports for musculoskeletal diseases had been submitted at this unit. Press reports that Marfrig's Bataguassu slaughterhouse has around 1,300 workers underline that 1,500 instances of musculoskeletal diseases over two years do indeed represent a high figure.¹⁷⁹

Inadequacy of PPE

Marfrig Bataguassu employees reported working in low temperatures between 6°C and 9°C with not everyone receiving adequate workwear such as sweaters to keep them warm in these conditions: "Sometimes the laundry provides sweaters, but not always, and they don't have enough for everyone."

Under NR-36, "employers must provide enough workwear so that employees can wear more than one piece at the same time at their discretion and depending on the activity and room temperature, complying with legal hygienic-sanitary requirements and thermal comfort".¹⁸⁰

In response to these findings, the company told us it provides workers with uniforms, sweaters, jackets, balaclava caps, gloves, socks, and thermal boots.

Noise

Workers also reported intense noise inside the plants. “It’s very noisy even with the earmuffs on,” said one. During the 2019 Labour Prosecution Service inspection, the company had presented the same noise assessment for very different jobs – for example, both for cleaning and for working with noisy equipment such as saws in the slaughter units. According to the Prosecution Service, the noise levels to which workers were exposed clearly could not be the same in these situations; moreover, reported numbers exceeded acceptable limits.

Marfrig denies any problems regarding noise level exposure and corresponding reporting: “In all inspections, including the latest one conducted in November 2022, nothing was pointed out in terms of exposure to noise.”

Exposure to decontamination agents

A worker reported high exposure to lactic acid, which is used at the post-slaughter stage to decontaminate meat.¹⁸¹ According to this interviewee, even when workers wear PPE, the acid “burns our skin and eyes. Our boots turn yellow, and if our boots turn yellow, just imagine our lungs.” His arms have red marks and itch.

Marfrig says it does not expose workers to chemical agents above legal thresholds and that all employees are provided with PPE. It also states that “the medical clinic of the Bataguassu meat processing unit has not received any reports or complaints from employees related to symptoms resulting from sore eyes due to the use of chemical compounds in production stages”.

Workers reported that Marfrig transfers workers who report some type of illness to the laundry department, which is considered a ‘lighter’ job, to avoid putting workers on leave and issuing required CATs. One said: “Several people work in the laundry with injured feet and hands, and some workers were there for three months with broken arms.” Interviewees told us doctors generally avoid issuing CATs and mentioned that a doctor who did issue CATs had been fired.

Marfrig states: “There is no history of not issuing CATs. Relocating employees with temporary medical restrictions is the company’s duty and aims at the health and well-being of workers.”

6. Concluding discussion and recommendations

Ten years after Brazil introduced **legislation to improve problematic workplace health and safety conditions** in meatpacking, workers in this key sector of the country's economy **still jeopardise their health and safety every day**. Government statistics, labour inspection reports, lawsuits, and interviews with meatpacking workers from the largest companies, government officials, and labour rights specialists show the Brazilian beef-processing industry is **struggling with frequent workplace accidents, high prevalence of work-related illness and injuries, and even casualties**.

Main issues highlighted by our research

Health and safety

Even meatpacking factories that are considered to be among the most modern in Brazil, such as Marfrig's hamburger unit in Bataguassu, are plagued by occupational health and safety problems. Workers interviewed at this unit and at the company's slaughterhouse in the same city reported more health issues (95%) than the average in our total sample (84%). The slaughter unit, employing 1,300 workers, highlighted this in registering 1,500 medical reports for musculoskeletal diseases between 2018 and 2019.

In all the factories whose workers we interviewed, workers complain of musculoskeletal diseases such as injuries or pain in the joints, ligaments, muscles, nerves, and tendons. The health issues reported overall range widely from cuts and scars caused by machinery, to nausea, headaches, and fainting, to anxiety, panic attacks, and depression. In extreme cases these issues, or a number of them combined, have reportedly led to permanent disablement from work.

Accidents

Among respondents at the JBS Pimenta Bueno unit, 89% had experienced ammonia leaks and 56% reported having suffered accidents at work. These percentages are well above the respective averages, 65% and 40%, reported by all workers we interviewed.

The most reported category of accidents in the sector is cuts, lacerations, wounds, contusion, and crushing. As to the official number of fatal accidents in beef slaughtering, this was 13 cases in 2021.

Exposure

The cold temperatures and high levels of noise meatpacking workers experience negatively affect their wellbeing and play an important role in the high number of health and safety issues plaguing the sector. Besides causing stress, risks of hearing loss, and tinnitus, exposure to noise at high levels and for several hours a day can cause irritability, loss of concentration, and reduced reflex speeds, all factors well known to lead to more accidents.

Similarly, exposure to cold temperatures in the meatpacking factories results in greater vulnerability to infections (colds, bronchitis, pneumonia), skin injuries, and work-related musculoskeletal disorders including repetitive strain injury (RSI). Almost all workers interviewed (93%) reported feeling thermal discomfort and 26% had not received adequate PPE. The problem with workers feeling cold was also singled out as an irregularity in recent government inspections of some JBS and Marfrig units.

Compounding the problem of cold and noisy workplaces is that PPE, including work sweaters, gloves, and earmuffs, is not always available or of adequate quality.

International pressure

Two recent developments internationally have increased pressure on Brazil, with its lucrative beef exports, to step up efforts to improve working conditions in meatpacking. First, the right to a safe and healthy work environment was included in the Declaration on Fundamental Principles and Rights at Work of the International Labour Organization (ILO) in 2022.¹⁸² The decision means that all ILO member countries pledge to respect and promote the fundamental right to a safe and healthy work environment, whether or not they have ratified specific ILO conventions.

Second, in February 2023 the EU reiterated that labour conditions in Mercosur, the socioeconomic alliance of Argentina, Brazil, Paraguay, and Uruguay, are of concern as obstructions to progress in negotiations on a free trade agreement between the EU and Mercosur.¹⁸³

These developments show increasing concern for respect for workers' rights internationally. However, a number of factors make fulfilment of workplace rights in the meat sector, including the right to health and safety, exceedingly difficult, and we discuss these issues below.

Industry challenges

The first main challenge is that Brazil is likely to continue increasing production to meet the projected growing demand for beef. According to stakeholders we interviewed, the greater the demand, the heavier the pressure on workers to become more productive. This in turn further increases the already high risks of accidents, injury, and illness affecting workers in this sector.

Reducing work pressure and overall working hours would be the most effective way to address the major workplace health and safety issues in the industry. However, such measures would also affect production capacity negatively, and production has already stagnated in recent years.

Second, Brazil's beef sector appears unable and so far unwilling to improve worker health and safety. The country's meatpacking industry received widespread criticism for its irresponsible behaviour during the Covid-19 crisis while simultaneously pocketing revenues that rose from US\$ 34.7 billion in 2020 to US\$ 40.8 billion in 2021.

Failing to take adequate protective measures, the sector played an important part nationally in spreading the virus. Even so, workers were called on to increase production to compensate for those who were absent because of being infected and to meet higher demand overall.

Problems caused by Covid-19 compounded the already serious health and safety issues the industry has not been able to address adequately for a long time, including containment of ammonia leaks. The details of the accident in 2021 at JBS in Pimenta Bueno discussed in Chapter 5 illustrate how devastating the effects of ammonia leaks can be for workers' health.

So far the industry seems more concerned to increase production and manage its reputation than to improve workplace health and safety. Company responses to our findings show the industry is currently in denial.

The companies have supported measures to weaken NR-36, resist having meat-packing work designated as an unhealthy sector, are hostile to trade union organising, oppress and lay off workers who seek improvement and fulfilment of their rights, and mislead labour inspections.

Comparing incidence reports nationally

There are large differences between the incidence of accidents and occupational health issues reported in our interviews for this report and national statistics. Under-reporting in national statistics partly explains these differences. Another factor is probably the way questions are asked. In contrast to official statistics, our interviews did not ask for health issues occurring in a specific year. With workers able to consider longer periods as a reference, this may have resulted in a higher incidence of reports in our interviews.

A selection bias effect may also have increased incidence reports in our interviews relative to official reports. Workers who have experienced workplace health issues, especially serious ones, may be more motivated to participate in interviews than those with little or no such personal history. This may be particularly the case when interview participants risk of getting into trouble with company management.

Comparing incidence reports internationally

Research for this report focused specifically on the incidence of workplace accidents and injuries in cattle meatpacking in Brazil. However, to place our findings in context, we looked for recent comparative data from other countries. This search identified similar independent interview-based research focusing on health and safety in the meat sector in only one other country: Ireland.¹⁸⁴ The Irish results suggest a similarity in health and safety conditions in the two countries.

Comparing official occupational health and safety statistics across countries is problematic because of different definitions and aggregations available. The EU, for instance, publishes statistics only for food manufacturing as a whole and reports only workplace accidents that lead to more than four days of absence. Comparison of the EU's statistics on food manufacturing with those on meat-packing in Brazil suggests a relatively high incidence of accidents in Brazil, especially in terms of fatalities.¹⁸⁵

As we have seen in Brazil, meatpacking is relatively more problematic for health and safety than most other work, including food manufacturing work. Therefore, one would expect a higher incidence of occupational accidents and health issues in Brazil's meat sector than in general food manufacturing in the EU. The EU's stricter categorisation of accidents would also be likely to result in such differences.

Approaches to address problem areas

Industry stakeholders interviewed for this research agree that dialogue, prevention, and enforcement are key to address the problems affecting the Brazilian meatpacking industry. They highlight three approaches for addressing problem areas: recovery breaks, workplace exercise, and reducing working hours and overtime. We consider these and other potentially important measures below, before presenting recommendations specifically for companies and for the Brazilian authorities.

Breaks

Meatpacking employers and the Brazilian authorities should uphold and adequately enforce psycho-physiological recovery breaks. NR-36 requires provision of a daily 60-minute break divided into six 10-minute or three 20-minute periods.

In the words of Artur Bueno, president of the National Confederation of Workers in Food and Related Industries: “[S]ome groups in the meat-processing sector want to reduce that break. Union members understand that it cannot be reduced.”

Among workers we interviewed for this report, only 48% reported taking their breaks as required by law. We heard accounts of employees signing their time-cards as if they had taken regular breaks whereas in fact their managers had pressured them to continue working during breaks.

Workplace exercise

Another important focus of improving industry health and safety would be enforcing workplace exercise to curb incidence of RSI. A major issue here is that cold chamber workers make 90 movements per minute, while the maximum number recommended to avoid health problems is one-third of that.

Companies should ensure their workers undertake mandatory physical exercise during working hours at the workplace to prevent RSI and occupational illnesses.¹⁸⁶ Our interviews found that 79% of respondents did not exercise at all during their work.

Reducing working hours

Long working hours including overtime are another key workplace health and safety issue to be addressed. In the interviews, 87% of respondents reported working overtime. Almost all workers at the JBS units worked overtime (97%). Indeed, overtime is the subject of several pending lawsuits in Brazil that seek court rulings that at least some aspects of meatpacking work are unhealthy and that overtime in such work is therefore illegal.¹⁸⁷

Labour prosecutor Leomar Daroncho considers that the average number of hours worked in meatpacking plants must be reduced, especially for the “most harmful activities, which have the highest number [of] and the most serious accidents”.

He observes: “There is a movement by trade unions, which has the support of experts and Labour Court judges and is accompanied by the Labor Prosecution Service, to open the discussion to reduce working hours in the sector.”

Labour inspections

Stakeholders agree on the need to both improve the quality and increase the quantity of labour inspections in slaughterhouses. Official inspection capacity is currently too weak to conduct a sufficient number of effective inspections. The government’s announcement in 2023 that it wants to hire new labour inspectors, for the first time since 2013, is welcome.¹⁸⁸ There is also a need for unannounced inspection to become the norm rather than the current mainly preannounced inspections that enable companies to prepare in advance to conceal the reality at the workplace.

Addressing under-reporting

More effective implementation of the system of registration of workplace accidents and diseases is also crucial for improving working conditions in meat processing. To this end, the pursuit of legal action against companies that under-report can help bring more transparency to the problem.

“Collective lawsuits can protect workers,” SINTRA-INTRA union president Marcos Cardoso dos Santos told us.

Social dialogue

For Artur Bueno of the Confederation of Workers in Food and Related Industries, an important step would be to overcome companies’ current resistance to working with unions to improve health and safety in the sector: “Healthy and safe workplace conditions are in the interest of companies, as workers produce better and perform their activities with much more confidence.”

Recommendations for companies

- ▶ Comply with all health and safety standards set by Regulation 36 (NR-36). Specifically, pay attention to compliance with psycho-physiological recovery breaks, workplace exercise, and legal working hours limits.
- ▶ Observe other relevant regulatory standards, especially NR-01 (General Provisions and Management of Occupational Risks), NR-07 (Occupational Health Medical Control Programme – PCMSO), and NR-09 (Evaluation and Control of Occupational Exposure to Physical, Chemical and Biological Agents).
- ▶ Root out workplace harassment. Practices of sanctioning, pressuring, and/or embarrassing workers suffering from occupational diseases or affected by accidents, and those who file collective actions with local unions, should stop.
- ▶ Establish a structural dialogue with workers’ representatives — local unions and national ones such as the National Confederation of Food Industry

Workers (Confederação Nacional dos Trabalhadores nas Indústrias de Alimentação e Afins, CNTA) – and government agencies and programmes such as the Superior Labour Court’s Safe Work initiative to monitor and improve health and safety conditions at workplaces.

- ▶ Carry out effective notification of occupational diseases and accidents by registering every relevant work accident report (CAT).
- ▶ Support the debate on the need to reduce the regular working hours in the sector.
- ▶ Contribute data to technical analysis about workplace activities that should be designated as unhealthy and therefore where overtime should not be allowed (unless authorised by the Ministry of Labour and Employment or collective agreements).

Recommendation for the Brazilian authorities

- ▶ To the Ministry of Labour and the Federal Government: Increase the number of labour inspectors and inspection capacity at slaughterhouses, including by hiring more personnel.
- ▶ To the Ministry of Labour and the Labour Prosecution Service: Ensure periodic unannounced workplace inspections carried out by independent and trained inspectors.
- ▶ To the Labour Prosecution Service: Ensure company compliance with workers’ rights regulation by signing agreements with companies (conduct adjustment agreements) and carry out audits and inspections to verify progress achieved.
- ▶ To the Superior Labour Court and programme partners: Strengthen and disseminate the Safe Work programme, whose 2023/2024 theme is “Democracy and Social Dialogue as tools for building a healthy and safe work environment”.
- ▶ To the Federal Government: Regulate to curb working hours in meatpacking, especially for the most unsafe and unhealthy activities that show a high prevalence of occupational accidents, diseases, and injuries.

Endnotes

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Colophon

Accident factories

Unhealthy and unsafe working conditions in Brazilian meatpacking

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