

Workers' rights in the context of the 'UNsafe and Uncontrolled' use of asbestos in Brazil

O direito do trabalhador e da trabalhadora no contexto do uso 'INseguro e DEScontrolado' do amianto no Brasil

| Hermano | Albuquerque | de Castro 1 , | Fernanda | Giannasi ² |
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DOI: 10.1590/2358-28982025E210562I

ABSTRACT This article critically analyzes the legal, political, and social trajectory of asbestos use in Brazil, emphasizing the implications for workers' health and the environment. Despite the global recommendations for a total ban by the World Health Organization and the International Labour Organization, Brazil upheld for decades the thesis of 'controlled and safe use' of asbestos. The paper explores the state laws banning asbestos, key judicial decisions, particularly those by the Supreme Federal Court in 2017, and subsequent normative developments up to 2025. It also highlights ongoing resistance, including the controversial laws from Goiás state allowing continued extraction for exports until 2029. Based on a qualitative and documentary methodology, the article underscores the decisive role of social mobilization, judicial activism, and civil society organizations such as the Brazilian Association of Exposed People to Asbestos in pushing for the asbestos ban. Furthermore, it discusses enduring challenges such as access to social security and compensation, insufficient recognition of asbestos-related diseases, and the urgent need for public policies to address health surveillance, safe asbestos removal, and remediation of environmental and human liabilities. Regional disparities in the implementation of asbestos bans and ongoing resistance illustrate the dynamic complexity between public health, labor rights, and economic interests.

KEYWORDS Asbestos. Supreme Court Decisions. Socio-environmental responsibility. Community participation.

RESUMO O ensaio analisa criticamente a trajetória jurídica, política e social do uso do amianto no Brasil, destacando os impactos sobre a saúde dos trabalhadores e o meio ambiente. Apesar da proibição recomendada por organismos como a Organização Mundial da Saúde e a Organização Internacional do Trabalho, o Brasil sustentou, por décadas, o discurso do 'uso controlado'. O texto revisita legislações estaduais de banimento, decisões judiciais – com destaque para o julgamento do Supremo Tribunal Federal em 2017 – e os avanços e retrocessos normativos até 2025, incluindo resistências como as leis do estado de Goiás, que ainda permitem a extração para exportação e sua continuidade até 2029. Com base em metodologia qualitativa e documental, o ensaio demonstra como a mobilização social, o ativismo judicial e a atuação de entidades como a Associação Brasileira dos Expostos ao Amianto foram centrais para a conquista do banimento. Também são abordados os desafios persistentes: o reconhecimento de direitos previdenciários e indenizatórios, a fragilidade nos diagnósticos das doenças relacionadas ao amianto, a necessidade de políticas públicas robustas de vigilância e desamiantagem. A análise revela as desigualdades regionais na aplicação das leis, resistências locais com base em interesses econômicos e recomenda a continuidade das ações de justiça socioambiental.

PALAVRAS-CHAVE Amianto. Decisões da Suprema Corte. Responsabilidade socioambiental. Mobilização social.

¹Fundação Oswaldo Cruz (Fiocruz), Escola Nacional de Saúde Pública Sergio Arouca (Ensp) – Rio de Janeiro (RJ), Brasil. hermano.castro@fiocruz.br

² Associação Brasileira dos Expostos ao Amianto (Abrea) - Osasco (SP), Brasil.

Introduction

Asbestos is a natural mineral fiber with high mechanical, thermal, and chemical resistance. These characteristics have led to its widespread use in Brazilian industry for over 100 years, particularly in the construction, textile, and automotive sectors. There are two main commercial varieties of asbestos: serpentine (chrysotile or white asbestos) and amphiboles, the latter of which have been banned in Brazil since 1991 by Annex 12 of the Ministry of Labor's Regulatory Standard (NR-15)1. Chrysotile asbestos was the fiber type widely used in construction and industrial products in Brazil. Its popularity stems from the abundance of this fibrous mineral in nature, its ease of extraction and processing, and, consequently, its low cost.

However, growing scientific evidence has highlighted its serious risks to human health, debunking the corporate theory that attributed the mineral's harmfulness solely to amphiboles. Studies validated by the World Health Organization (WHO) estimate more than 200,000 deaths per year occur worldwide from occupational and environmental exposure to asbestos2. The WHO and the International Labour Organization (ILO) recommend the total ban of all forms of asbestos due to their adverse health effects, such as Asbestos-Related Diseases (ARDs), including asbestosis, pleural diseases and malignant diseases, such as lung and colorectal cancer and cancer of other organs, for example, the larvnx and ovary, as well as mesothelioma or also called 'asbestos cancer'3,4.

The WHO's International Agency for Research on Cancer (IARC) classifies asbestos as a known human carcinogen. In Brazil, the National List of Carcinogenic Agents for Humans (Linach) includes asbestos among the agents proven to cause cancer⁵.

Associated with several social, legal, and legislative initiatives, progress was made toward the total banning of all forms of asbestos in Brazil, as had been the case since the late

twentieth century in several countries, which had already reduced or altogether banned the use of asbestos in more than 3,000 industrial products. However, the global environmental and human liabilities are immeasurable.

In Brazil, the regulatory trajectory of asbestos is the result of social, legal, and legislative mobilizations. It is also being marked by disputes between the protection of workers' health and the economic interests of the productive sectors. The national regulatory framework with the most significant impact on the defense of corporate interests was, undoubtedly, the approval of Law No 9.055/1995 and its regulatory Decree No 2.350/97, which allowed the 'controlled and safe' use of the chrysotile variety, in opposition to several bills that were being processed in the House of Representatives to ban it, some for immediate implementation and others in the medium and long term.

It was only on August 24, 2017, that the Supreme Federal Court (STF), through the judgment of Direct Action for the Declaration of Unconstitutionality (ADI) 3937/2008, which challenged the São Paulo state law banning asbestos, recognized the constitutionality of the law under discussion and the incidental unconstitutionality of Art. 2 of Law No 9.055/956-8, as this provision was not on the agenda of this judgment, but instead of ADI 4066. This situation was a huge step forward towards a total ban in the country, which only actually occurred on November 29, 2017, as part of the judgment of ADIs 3406 and 3470 against the Rio de Janeiro State asbestos ban law. This decision achieved erga omnes effectiveness (for all federated entities) and binding effectiveness (for all bodies of the Judiciary and Executive Branches).

This article aims to map and critically analyze a set of state laws, court decisions, and complementary regulations on the production and use of asbestos, exploring regional differences, the political and social factors that influenced the process, and the implications of the ban for public health and environmental

justice, based on the human right to live in a healthy environment.

Material and methods

This study adopted a qualitative approach based on documentary research. It focused on the analysis of state and federal legislation, judicial decisions, and institutional publications on the use and banning of asbestos in Brazil to understand the legal, political, and social trajectory of asbestos use in Brazil and its impacts on workers' health and the environment. Qualitative research is particularly suited to investigating complex events in their natural context, enabling an in-depth understanding of the social, legal, and political dynamics involved in the asbestos ban. Document analysis, in turn, is a robust method that allows for the systematic collection and interpretation of data contained in written documents, providing insights into past events, trends, and the perspectives of different social stakeholders. The theoretical framework is anchored in the perspectives of environmental justice and the right to health.

The timeframe covers the 1991-2025 period. This period was defined by significant milestones in Brazilian asbestos legislation: the ban on amphiboles and the surveillance of exposed workers up to 30 years after the end of their employment contract in 1991, among other advances, by Annex 12 of NR-15¹; the information on exposed workers and surveillance by the Unified Health System (SUS), established by Law N° 9.055/95 and Ordinance N° 1.851/20069, still deficient in compliance; and the regulatory and judicial advances and setbacks up to 2024. The documents were collected from December 2024 to June 2025.

The survey used several previously defined categories: i) document type; ii) geographic and temporal scope; iii) regulatory content; iv) legal and social implications. Documentary sources were selected based on their regulatory, judicial, and institutional relevance, including legal

bases, portals of State Legislative Assemblies, State Courts of Justice, reports from the Brazilian Association of Asbestos-Exposed Persons (ABREA), Supreme Federal Court rulings, and federal regulations, among other relevant sources.

The documents were selected by the article's authors, who have experience in occupational health and public policy. Priority was given to documents with a direct impact on the health protection of workers exposed to asbestos, banning its use, and remedial measures:

- Legal norms (federal and state laws, decrees): We selected federal and state laws that regulated or banned asbestos in Brazil within the established timeframe to understand legislative developments and jurisdictional disputes.
- Court rulings: Priority was given to surveying ADIs and other relevant Supreme Federal Court rulings addressing asbestos, especially those with a binding and *erga omnes* effect, such as those from 2017. We also considered pending lawsuits that show resistance to the ban, such as ADI 6200, which opposes Law N°20.514/2019 of Goiás, which allows for the exploitation of the mineral for export purposes.
- Supplementary publications and reports from civil society organizations: Reports and publications from ABREA were included due to its central role in social mobilization and the production of evidence on the impacts of asbestos, besides its iconic status in the fight for the ban.
- Complementary federal standards: regulatory standards and other technical documents from bodies such as the Ministries of Labor and Health and the Jorge Duprat Figueiredo Foundation for Occupational Safety and Medicine (FUNDACENTRO) were analyzed, which detail aspects of exposure, surveillance, and asbestos removal.

The central databases and platforms consulted for the survey were:

- Legal bases: LexML, JusBrasil, websites of State Legislative Chambers and Courts of Justice.
- Complementary publications: ABREA's institutional reports and technical publications,

including its website and social media.

For a better understanding of the presentation of the analyzed data, *table 1* summarizes the primary documents and their origins, illustrating the diversity of sources that supported this essay.

Table 1. Documents analyzed and their origins

| Document category | Main examples | Origin/Database | |
|-------------------------------------|--|---|--|
| Federal laws | Law nº 9.055/1995; Decree nº 2.350/97; Law nº 8.213/1991 | Federal Official Gazette, Planalto | |
| State laws | Law nº 13.113/2001 (SP); Law nº 12.684/2007 (SP); Law nº 3.579/2001 (RJ); Law nº 20.514/2019 (GO); Law nº 22.932/2024 (GO) | State Legislative Assemblies Websites | |
| Supreme Federal Court (STF) rulings | ADI 3937/2008; ADI 3406 and 3470; ADI 6200; ADI 3356; ADI 3357; ADI 4066 | Portal STF, JusBrasil | |
| Regulatory standards | NR-15 - Annex 12; Chapter V of Title II/CLT | Ministry of Labor and Employment, Labor Legislation | |
| Ministerial ordinances | Ordinance nº 1.851/2.006 | Ministry of Health | |
| | ABREA's institutional reports | ABREA's official website | |
| CSO reports and publications | Fundacentro's Good Practices Guide; WHO studies; IARC; Linach. | Institutional websites (WHO, Fundacentro), scientific databases | |

Source: Prepared by the authors.

CSO - Civil Society Organizations.

The documents were analyzed critically, seeking to identify legal frameworks, court decisions, arguments used, and the political and social context in which they were produced. The authors of this essay were responsible for the systematic reading of the texts in these categories:

- Exploratory reading: for a general understanding of the content and context of each document.
- Identification of thematic categories: prioritizing information related to legislation, court decisions, health impacts, social mobilization, and economic resistance.
- Content analysis: detailing the arguments, stakeholders involved, and legal and social implications.
- Data comparison and triangulation: comparing information obtained from different sources to identify convergences, divergences, and gaps.

The prioritization criteria for the content analyzed included:

- Legal relevance: documents that established legal precedents or were the subject of significant debate in the Supreme Federal Court (STF).
- Social and public health impact: information detailing the effects of asbestos exposure and the response of civil society and health institutions.
- Representativeness: documents reflecting the positions of different stakeholders (government, companies, workers, and civil society).
- Current status: priority given to the most recent decisions and legislation, which outline the current scenario of the ban.

Results

Rights of asbestos-exposed workers

From a civil and labor liability perspective, the 1988 Federal Constitution (CF/88) and the Consolidated Labor Laws (CLT) guarantee workers the right to a healthy and safe environment under the CF/88 in its Art. 7, XXII, and the Regulatory Norms of Chapter V of Title II/CLT. In its Arts. 186 and 927, the Brazilian Civil Code defines, respectively, what constitutes an unlawful act and when someone can be held liable for harm caused to another person. It also guarantees compensation for moral and material damages in cases of proven corporate negligence, in collective and individual moral damages actions.

Thus, a set of laws provides guarantees for compensation for damage caused at work. In the case of asbestos, due to exposure that leads to illness and death, workers are entitled to social security benefits, such as accident-related sickness benefit (Art. 59, N° 8.213/1991), disability retirement (if permanently disabled), and survivor's pensions for family members in the event of death, in addition to special retirement, which reduces the time of exposure in order to preserve their health¹o.

The enactment of Law N° 9.055/1995, which regulated the controlled use of chrysotile asbestos in Brazil⁷, marked the beginning of a distinct legislative movement across several federal spheres. Within this context, local regulations emerged seeking to establish more restrictive parameters, such as Law N° 13.113/2001 of the city of São Paulo and, later, Law N° 12.684/2007 of the state of São Paulo.

The 2007 São Paulo state legislation adopted a distinct approach by explicitly focusing on banning the use of asbestos within its territory, thus avoiding questions related to the Federal Government's legislative authority over general extraction and trade regulations. This legislative strategy contrasted with provisions of previous state laws, such as São Paulo state Law Nº 10.813/2001 and Mato Grosso do Sul Law Nº 2.210/2001, which had been the subject of constitutional challenges before the Supreme Federal Court (STF) because they addressed matters of exclusive federal jurisdiction.

This evolutionary process of asbestos legislation shows how different federative entities sought, within their respective jurisdictions, to establish rules on the topic, reflecting concerns for public health and the environment in their territories. The approach adopted by the state of São Paulo in 2007 represented a legislative alternative that considered the constitutional limits of the Brazilian federation and consumer rights¹¹.

Between 2001 and 2017, following the same path as São Paulo's state second asbestos ban law, several states passed specific laws banning asbestos, including Rio de Janeiro, Pernambuco, and Rio Grande do Sul. However, many of these provisions were challenged for allegedly violating Federal Law N° 9.055/1995,

leading to the issue being taken to court in the Supreme Federal Court (STF) in a lengthy legal debate¹², culminating in the landmark rulings of 2017 with widespread repercussions both within and outside the country.

We should mention that, among the main challenges to the state ban laws, ADI 3356 (Pernambuco), 3357 (Rio Grande do Sul), 3406 and 3470 (Rio de Janeiro), and 3937 (second São Paulo state law), filed by the workers' representative entity, the National Confederation of Industrial Workers (CNTI), always occurred under the public discourse of defending jobs, which would 'supposedly' be eliminated with the ban on asbestos, which, in fact, was not the case.

STF rulings and their effects

On August 24, 2017, the STF Plenary dismissed ADI 3937, filed by CNTI against Law N° 12.687/2007 of the state of São Paulo, which prohibits the use of products, materials, or

artifacts containing any type of asbestos in the state territory.

The ministers also declared, incidentally¹¹, the unconstitutionality of Article 2 of Federal Law No 9.055/1995, which permitted the extraction, industrialization, commercialization and distribution of the use of chrysotile asbestos in the country, and established the validity of the state law that prohibits the use of any fiber (chrysotile or amphibole) under the argument that the rights to health and a balanced environment are more important than economic interests.

Regional differences

The states of São Paulo, Pernambuco, Rio Grande do Sul, and Rio de Janeiro pioneered asbestos-ban legislation. These laws were challenged, as described above, for allegedly encroaching on federal jurisdiction, culminating in legal disputes before the Supreme Federal Court.

Table 2. State laws on asbestos ban by period challenged in the Supreme Federal Court

| UF | State Law | Year | Coverage | Legal status |
|----|---------------|------|---|---|
| MS | Law nº 2.210 | 2001 | Total ban on asbestos in the construction sector | Declared Unconstitutional |
| SP | Law nº 10.813 | 2001 | Total ban on asbestos | Declared Unconstitutional |
| SP | Law nº 12.684 | 2007 | Total ban on the use of asbestos and products containing it | Declared Constitutional |
| RJ | Law nº 3.579 | 2001 | Progressive replacement of asbestos in the production and marketing of asbestos-containing products | Declared Constitutional |
| PE | Law nº 12.589 | 2004 | Total ban on asbestos | Declared Constitutional |
| RS | Law nº 11.643 | 2001 | Total ban on asbestos | Declared Constitutional |
| GO | Law nº 20.514 | 2019 | Allows extraction of ore 'exclusively' for export | ADI 6200 pending at the STF |
| GO | Law nº 22.932 | 2024 | Extends mineral extraction until 2029 | Challenged as unconstitutional, but not taken to court, awaiting decision on ADI 6200 |

Source: Prepared by the authors.

Table 2 shows the state laws on the banning of asbestos brought to court before the Supreme Federal Court (STF), with the exception of Goiás Law Nº 22.932/2024. However, many other state and municipal laws have been approved to ensure compliance with the STF ruling. Dozens of new municipalities have also legislated on the monitoring of environmental liabilities and the replacement of materials. The fact is that, in the state of Goiás, where the asbestos mine in Brazil is located, the only one in operation in the country, the two laws are contested for being clearly unconstitutional and violating the Brazilian Supreme Federal Court's ruling to allow the continuation of asbestos mining, guaranteeing its maximum possible survival.

A brief survey of proposed state and municipal laws reveals that the South and Southeast regions accounted for most of the prohibitive legislation, while states in the Midwest and the North had fewer bills. These variations reflect the influence of local industries, the organization of social movements, the involvement of public institutions such as the Labor Public Prosecutor's Office (MPT), which played a significant role in these prohibitions, especially in the state of Santa Catarina, as well as the political stance of the State Legislative Assemblies of these regions.

ABREA's role in the fight to ban asbestos in Brazil

ABREA is a relevant entity in the history of Public Health and environmental justice in Brazil. Founded in 1995, it was recognized as a Federal Public (Ordinance N° 2.413/2005), State (Law N° 11.703/2004 – SP), and Municipal Public Utility (Law N° 3.726/2002 – Osasco-SP), consolidating its position as the leading voice of ARD-affected workers and their families. Its actions were decisive in the definitive ban on asbestos in Brazil, decreed by the Supreme Federal Court in 2017 – a historic milestone, as already mentioned, as the country was the only one in the world to

have the ban established by the Judiciary, and not by the Executive or Legislative branches, and in a context in which mining was still in full swing.

ABREA's main achievements and actions

a. Combating the Asbestos Lobby and legal victories

- Declaration of unconstitutionality of the federal law that permitted the 'controlled use' of asbestos, dismantling the 'safe use' narrative.
- Vigorous advocacy as *amicus curiae* in the Supreme Federal Court cases that aimed to declare the unconstitutionality of approved state laws.
- Production of reports and technical dossiers that supported decisions by members of parliament, prosecutors, and judges.

b. Legislative and regulatory advances

- Pressure for the approval of 'municipal and state ban laws' since the 2000s.
- Active participation in the approval of Resolution N° 348/2004 of the National Environmental Council (CONAMA), which classified asbestos waste as hazardous, requiring proper disposal in Class I industrial landfills¹⁴.

c. Health surveillance and registration of victims

• Encouraging the promotion and implementation of ARD registration systems, such as the Notifiable Diseases Information System (SINAN), and the creation of Datamianto (with implementation expected soon in the

SUS) to map ARDs and promote surveillance of those exposed.

• Partnerships with universities, FUNDACENTRO, and the Labor Public Prosecutor's Office (MPT) in information campaigns and asbestos removal projects.

d. Memory and sensitization

- Creation of the Asbestos Victims Memorial in Osasco, honoring those who lost their lives due to exposure to the carcinogenic fiber.
- Production of brochures, educational materials, photographic exhibitions and digital campaigns on social media (such as the one available on the ABREA website) to raise awareness about the risks of asbestos and the rights of victims.

e. Legal support and social mobilization

- Support for hundreds of public and individual civil lawsuits for moral and material damages, for the removal of materials from facilities containing asbestos, and for the restoration of areas degraded by mining and the processing industry.
- Active participation in public hearings and institutional pressure for regulatory reforms.

LEGACY AND STRUGGLE CONTINUITY

ABREA not only led the fight to ban asbestos but also transformed this cause into a movement for socioenvironmental justice and Public Health, ensuring victims' voices were heard. Its work remains essential in the face of attempts at legislative rollbacks, reinforcing the need for 'constant vigilance' against asbestos risks.

In short, in the health sector, it ABREA promoted the creation of Datamianto (a system for reporting asbestos-related diseases) and reinforced the importance of SINAN records

to provide visibility of the cases of ARDs in the country. It established partnerships with universities, the Oswaldo Cruz Foundation (FIOCRUZ), FUNDACENTRO, and the Labor Public Prosecutor's Office (MPT) to develop educational campaigns for workers and their families, as well as decontamination and rehabilitation projects for areas degraded by the asbestos industry, especially the mining sector. It promoted collective and individual lawsuits, assisting hundreds of workers and their families in seeking compensation for moral and material damages. It also organized public hearings and mobilizations to push for regulatory changes at all government levels. It worked in public communication, developed educational materials, raised awareness of the risks of asbestos, and designed the aforementioned Asbestos Victims' Memorial in Osasco, a symbolic landmark in the struggle. In short, ABREA is an example of resistance, mobilization, and achievement, leaving a legacy that exceeds the ban - a commitment to life, memory, and justice.

Discussion

The trajectory of asbestos in Brazil highlights how protecting workers' health and the environment depends on multiple institutional bodies. The Supreme Federal Court's leadership was crucial for regulatory advances. However, it also revealed fragile public policies that, for decades, preserved and even promoted the use of asbestos, widely recognized as dangerous and harmful to health. The role of organizations like ABREA has been crucial in generating evidence and mobilizing society. Since its founding in 1995, ABREA has been a driving force in ban asbestos activism in Brazil. Its main initiatives include:

• Support for victims and families, offering legal, social, and health support to workers and their families affected by asbestos exposure.

- Knowledge production and reporting: collecting data, conducting research, and disseminating information about the risks of asbestos, demystifying the theory of 'safe and controlled use'.
- Action in various spheres: actively participating in legislative debates, monitoring legal proceedings (such as the 'We're Still Here' declaration regarding ADI 6200), and lobbying for robust public oversight and reparation policies.
- Social mobilization and sensitization: organizing campaigns, seminars, and events to raise awareness among society and public authorities about the severity of the problem. ABREA's 'institutional reports and technical publications', dating from 2005 to 2023, testify to its ongoing work.

Judicialization of the issue served as an alternative to the paralysis of the Federal Executive and Legislative branches. ARDs have a long latency period, especially cancers and mesothelioma, which can take up to 50 years to manifest after the first exposure. Thus, persistent environmental liabilities and a large number of sick workers are expected in the coming decades. This fact points to the need for integrated public policies in the Health sector and judicial redress, as well as the urgent need to expand information and records, through the existing DataSUS systems, such as the correct communication of deaths in the Mortality Information System (SIM), illnesses in SINAN, and the recently created Datamianto, not yet fully incorporated into the DataSUS system, which aims to provide instruments and transparency for conducting the surveillance of workers and populations environmentally exposed to the carcinogenic asbestos.

The ban aims to eliminate exposure and, consequently, ARD cases. However, the environmental challenge remains, with thousands of buildings still containing asbestos, which

requires safe removal (asbestos removal), robust public policies, and adequate infrastructure for managing toxic waste.

FUNDACENTRO, together with other research and teaching institutions, such as FIOCRUZ, has been developing protocols and presenting proposals for implementing asbestos removal programs, training specialized labor for safe removal, providing incentives for replacing these contaminating materials, and supporting the economic transition in municipalities with mining operations, whether closed, deactivated, or still in operation¹⁵.

The Brazilian asbestos experience is not isolated internationally. Several countries have faced and continue to face similar challenges in their legal, political, and social history regarding the mineral. For example, in the United States of America (USA) and Canada, asbestos use was widespread for decades, and although progressively restricted, the total ban in Canada was a long process. In the US, the ban is still incomplete and sectoralized, with setbacks marked by the current federal government policy averse to socioenvironmental advances. However, intense legal battles and mobilization of thousands of victims persist, as we have seen in the case of women with cancer contaminated by Johnson & Johnson talc. The European Union, on the other hand, took a more proactive approach, banning asbestos in all its Member States in 2005, following decades of scientific evidence and social pressure. However, even there, the challenge of environmental liabilities and the management of ARDs persists. Banning processes have also occurred in South American countries, such as Argentina, Chile, Uruguay and Colombia more recently, often influenced by political and even business decisions, and by pressure from health and environmental organizations, echoing the fight to ban asbestos in the Americas as a Public Health issue, although with poor social mobilization, so necessary for the permanent monitoring of environments and the health of those exposed.

These comparisons reinforce the problem's complexity and the need for structural and ongoing public policies to address the long-term impacts of asbestos exposure, as observed in debates on development and sustainability, and the limits of local solutions to a global health problem. Global experience reiterates that, even after legal bans, health surveillance, remediation, and liability management are challenges that persist for generations.

Conclusions

This brief analysis of the presence of the carcinogenic mineral in Brazil offers a roadmap to the documentary production related to asbestos, highlighting the complex interplay between law, justice, social mobilization, science, and public policy. It reveals progressive advances in health protection, albeit uneven across states. The 2017 Supreme Court ruling was a crucial step, but addressing the harm caused by asbestos use still requires structural measures for Public Health, environmental justice, and reparations for collective and individual social rights. The lack of engagement in these prevention and reparations actions by the Federal Executive and Legislative branches has compromised and delayed the effectiveness of the measures adopted by the Brazilian Judiciary.

The country has been evolving from regulatory permissiveness to a near-total ban, supported by court rulings and state legislation, some innovative and others still recalcitrant, such as that of the state of Goiás. This reality, with laws like the 2024 Goiás law that extends

extraction for another five years, points to the persistent economic interests that challenge the scientific and legal consensus on asbestos's harmfulness. Progress is needed in managing environmental liabilities, Public Health policies, and socioeconomic justice strategies for workers and affected communities. The need to safely remove asbestos from thousands of buildings (asbestos removal) requires robust public policies and adequate infrastructure for the management of toxic waste, such as those proposed by FUNDACENTRO and FIOCRUZ¹⁵.

Furthermore, significant challenges persist in guaranteeing the individual rights of those affected. Difficulties in diagnosis within the SUS, the lack of medical expertise infrastructure at the National Institute of Social Security (INSS) for disease recognition, and judicial delays in compensation processes are barriers that have persisted for years. In some states, compensation amounts are considered paltry, reflecting a view that sometimes disregards the value of workers' lives vis-à-vis productive activity. These points reinforce the need to strengthen health and justice systems to ensure adequate reparation for damages and the appreciation of life as an inalienable human right.

Collaborators

Castro HA (0000-0003-1191-5671)* and Giannasi F (0009-0004-4219-4680)* contributed equally to all stages of the construction of the manuscript.■

^{*}Orcid (Open Researcher and Contributor ID)

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Received on 04/19/2025 Approved on 07/12/2025 Conflict of interest: Non-existent Data availability: Research data are contained in the manuscript itself Financial support: Non-existent

Editor in charge: Heleno Rodrigues Corrêa Filho