
WORKER SAFETY IN INDIA'S FIREWORK INDUSTRY

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ABSTRACT

The firework industry remains one of the most hazardous sectors of employment in India. While it provides livelihood to thousands of workers, the frequency of factory explosions and fire accidents raises serious concerns about workplace safety. This study examines whether the existing legal and regulatory framework is effective in protecting workers engaged in firework manufacturing.

The research analyses key legislations governing the industry, including the Explosives Act, 1884, the Factories Act, 1948, and the Occupational Safety, Health and Working Conditions Code, 2020. It evaluates how these laws address safety obligations, licensing requirements, and employer responsibility. Judicial decisions of the Supreme Court, High Courts, and the National Green Tribunal are examined to understand the courts' approach towards liability, compensation, and enforcement in cases of industrial accidents.

The study also relies on recent firework factory accidents as case studies to highlight recurring patterns of non-compliance, weak inspections, and regulatory failure. The findings indicate that the primary concern is not the absence of legal provisions, but their ineffective implementation, especially in small-scale and informal units. Workers continue to face risks due to lack of training, inadequate safety equipment, and economic vulnerability. The paper concludes that improving safety in the firework industry requires stricter enforcement, regular inspections, worker awareness, and stronger accountability mechanisms. Legal reform must be supported by effective administrative action to prevent avoidable loss of life.

Keywords: Firework industry, Worker safety, Explosives Act, Industrial accidents, Labour law.

• Introduction

The firework industry in India is a major source of employment, especially in states like Tamil Nadu, where Sivakasi alone contributes a large share of the country's total production. However, behind the colourful celebrations and festivals, there is a harsh reality of unsafe working conditions, exposure to hazardous chemicals and frequent accidents. Workers often handle explosive materials in cramped units with little ventilation, poor safety training and no protective gear. Many of them come from economically weaker backgrounds and take up this work because they have no other livelihood option.

Accidents in firework factories are not new. Every year, incidents of explosions, fires and deaths are reported, yet the working conditions remain almost unchanged. What makes the issue more concerning is that several laws already exist, like the Factories Act, 1948 and the Explosives Act, 1884. Recently, the Occupational Safety, Health and Working Conditions Code, 2020 was introduced with the aim of modernising and improving labour safety standards. But in reality, these laws often remain on paper, especially in small-scale and unregistered units.

This research focuses on understanding this gap between law and actual practice. It aims to examine whether the legal framework is sufficient and what exactly goes wrong in the enforcement process. The study is important because it deals not only with legal compliance but also with human lives, dignity and the right to a safe workplace.

• Statement of the Problem

Even though the firework industry has existed for decades and is governed by multiple laws, worker safety continues to be a serious concern. Almost every year, cases of explosions, factory fires and accidental deaths are reported, especially in Sivakasi and other small manufacturing towns. These incidents show that safety rules are either not followed or not properly enforced. Many firework units operate without proper licenses, ignore safety guidelines, and employ workers without giving them training or protective equipment. As a result, workers who are often women, children and daily wage earners face high risks just to earn a basic livelihood.

The problem is not only about the dangerous nature of the work. It is also about the failure of the system to protect those who are most vulnerable. Laws like the Factories Act, the Explosives Act and now the Occupational Safety, Health and Working Conditions Code, 2020 are meant to regulate such industries. But in reality, inspections are rare, penalties are weak, and many units continue to function informally, escaping legal scrutiny. There is also a lack of awareness among workers about their rights and safety procedures.

Therefore, the core issue lies in the gap between the legal framework and actual ground-level implementation. The problem this research addresses is whether the current legal and administrative system is sufficient to ensure safe working conditions in the firework industry, and if not, what reforms both legal and practical are needed to improve the situation.

• **Research Objectives**

- A. To study the nature of the firework industry in India and identify the major occupational hazards faced by its workers.
- B. To study the laws related to worker safety, such as the Factories Act, the Explosives Act, and the Occupational Safety, Health and Working Conditions Code.
- C. To analyse judicial decisions relating to worker safety, liability, and compensation in the firework industry.
- D. To identify enforcement failures and implementation challenges in ensuring workplace safety in firework manufacturing units.
- E. To examine selected firework industry accidents as case studies to understand recurring safety lapses.
- F. To suggest practical steps and legal reforms to improve safety and protect workers from future accidents

• **Research Question**

This study is guided by a central question, that is, whether the existing legal framework and enforcement mechanisms are enough to ensure workplace safety for workers in India's

firework industry, and if not, what legal and practical reforms are required.

• Research Methodology

This study will adopt a qualitative doctrinal research methodology. The research is based entirely on secondary sources and aims to provide a comprehensive understanding of the legal and practical aspects of worker safety in India's firework industry. The legislative provisions under the Factories Act, 1948, the Explosives Act, 1884, and the Occupational Safety, Health and Working Conditions Code, 2020, will be closely examined to understand the existing safety standards and obligations imposed on employers. Academic journal articles, scholarly papers, and research studies will be used to assess the adequacy of these legal frameworks and their effectiveness in protecting workers in hazardous sectors. To illustrate the practical application or failure of these laws, news reports and documented accident cases will be analyzed. Relevant judicial decisions will be incorporated to demonstrate how courts have interpreted safety obligations in practice. The study will not include any primary data collection such as interviews, field surveys, or direct observation, but will rely on a critical review of the literature, legal texts, and reported incidents to identify gaps and propose reforms.

• Scope and Limitations of the Study

This research focuses specifically on the firework industry in India, emphasizing the safety, health, and working conditions of its labor force. It will explore the historical development of occupational safety regulations in hazardous industries and examine how these laws have evolved to address risks unique to the firework sector. The study will also investigate recent industrial accidents, particularly in Sivakasi, Tamil Nadu, which is India's primary hub for firework manufacturing. These incidents will be analyzed as case studies to identify recurring safety issues, enforcement gaps, and systemic challenges.

Despite its broad analytical scope, the study has certain limitations. It is entirely based on secondary sources and does not involve field surveys, interviews, or direct observation of workplaces. Reliance on media reports and government data may limit the completeness or accuracy of information, as reporting of accidents in India is often inconsistent and fragmented. Moreover, because a large part of the industry operates informally, detailed data on working conditions, accidents, and compliance is often unavailable. Nevertheless,

the research will triangulate multiple sources to provide a reliable and well-supported assessment of the safety challenges faced by firework industry workers.

• Chapters

1. Introduction to the Firework Industry and its Occupational Hazards

The firework industry in India represents a significant segment of the national economy, with its production primarily concentrated in Sivakasi, Tamil Nadu, which accounts for nearly 90% of the country's firework output. Despite its economic importance, the industry is characterized by extremely hazardous working conditions that endanger thousands of workers. The manufacturing process involves the use of highly explosive and inflammable materials, which expose workers to serious risks of accidents, injuries, and occupational diseases.¹ Workers in this industry routinely handle chemicals such as potassium nitrate, sulfur, and aluminum powder, all of which are integral to the fireworks manufacturing process. The handling of these materials is typically done manually in small, overcrowded sheds that lack adequate ventilation. Such conditions make workers susceptible to burns, respiratory disorders, and other chronic health problems.² The dangerous nature of this work is evident from the frequent explosions and fire accidents reported across the country. Between 2023 and 2024, at least 91 workers lost their lives in fireworks manufacturing accidents, while many others succumbed later to severe burn injuries.³

The root causes of unsafe working conditions in this sector are largely structural and economic. Factory owners often prioritize high output and profits over worker safety. Many workers are employed on a piece-rate basis, compelling them to work faster and longer hours, which increases the likelihood of accidents. Employers frequently ignore mandatory safety measures such as maintaining fire extinguishers, installing water tanks for emergencies, and providing protective gear to employees.⁴

¹ Thiagarajan Kamala, 'Invisible Suffering': Deadly Risks in India's Fireworks Factories, *Global Health NOW* (Apr. 14 2025), <https://globalhealthnow.org/2025-04/invisible-suffering-deadly-risks-indias-fireworks-factories>.

² Ajith S, Arumugaprabu V, Ajith V, Naresh K, Rama Sreekanth P, et al., *Hazard Identification and Risk Assessment in Firework Industry*, 56 *Materials Today: Proceedings* 1083 (2022), <https://doi.org/10.1016/j.matpr.2021.10.102>.

³ *Supra* Note 1.

⁴ Bandyopadhyay Orchie, *Firecracker factories: an explosive mix*, British Safety Council India (Mar. 7 2024), <https://www.britsafe.in/safety-management-news/2024/firecracker-factories-an-explosive-mix>.

Recognizing these challenges, the Indian legislature has introduced several laws aimed at safeguarding workers in hazardous occupations. The Occupational Safety, Health and Working Conditions Code, 2020, consolidates and updates older labor legislations to create a comprehensive framework for ensuring occupational safety. The Code requires employers to maintain workplaces free from hazards, conduct regular health check-ups, and provide welfare facilities. It also mandates registration, licensing, and compliance with prescribed safety standards for factories.⁵

Recently, a major explosion in a firework factory in Andhra Pradesh in October 2025 caused six deaths and several injuries. Investigations revealed inadequate safety precautions and careless handling of flammable materials as the primary causes. Such tragedies highlight the urgent need for stricter regulation, proactive inspections, and the promotion of a strong safety culture within the industry.⁶

While the firework industry continues to play a vital economic role in India, it remains one of the most perilous occupational sectors. Protecting the lives and health of its workers demands a combined effort of legal reform, effective enforcement, and widespread awareness. This chapter sets the groundwork for examining the legal framework, judicial approaches, and case-specific realities of worker safety that will be explored in the following chapters.

2. Legal Framework Governing the Firework Industry in India

The legal framework for the firework industry in India is primarily based on the Explosives Act, 1884,⁷ and the Factories Act, 1948,⁸ which together form the foundation for ensuring workplace safety and operational control in hazardous manufacturing units. These legislations are further supplemented by environmental and safety guidelines issued by central and state authorities. While the Occupational Safety, Health and Working Conditions (OSHWC) Code, 2020, consolidates several existing labor laws to strengthen worker welfare, it does not include Explosives Act, 1884.⁹

⁵ The Occupational Safety, Health and Working Conditions Code, 2020, No. 37, Acts of Parliament, 2020 (India).

⁶ Rao Deepthi, Andhra Pradesh firecracker factory fire kills workers, burn injuries mount, *India Today* (Oct. 8 2025), <https://www.indiatoday.in/india/andhra-pradesh/story/andhra-pradesh-firecracker-factor-fire-workers-dead-burn-injuries-2799715-2025-10-08>.

⁷ The Explosives Act, 1884, No. 4, 1884 (India).

⁸ The Factories Act, 1948, No. 63, Acts of Parliament, 1948 (India).

⁹ *Supra* Note 5.

Instead, it operates as a complementary framework for occupational safety and health across hazardous industries, including the firework sector.

The Explosives Act, 1884, serves as the cornerstone statute for regulating the manufacture, possession, use, sale, transport, import, and export of explosives in India. Under Section 6, the Central Government is authorised to prohibit the manufacture or possession of particularly dangerous explosives for reasons of public safety.¹⁰ Section 8 requires that if any explosion or fire involving explosives occurs in a place, vehicle, vessel, or aircraft, causing loss of life, serious injury, or property damage, the person in charge must give notice within the prescribed time and manner to the Chief Controller of Explosives and the nearest police station. This ensures timely reporting and investigation of such accidents.¹¹ Further, Section 9B prescribes punishment for violating rules or licence conditions. Illegal manufacture, import, or export of explosives can lead to up to 3 years' imprisonment or ₹5,000 fine. Illegal possession, use, sale, or transport can lead to up to 2 years' imprisonment or ₹3,000 fine. Failure to report an accident can result in a ₹500 fine, and if it causes death, up to 3 months' imprisonment or fine or both.¹² It is important to note that this section has not been amended since its insertion in 1978, hence the fines remain so less.

Parallely, the Factories Act, 1948, governs all factories, including firework manufacturing units, and provides a broader framework for the health, safety, and welfare of workers. Section 7A imposes a general duty on factory occupiers to ensure, as far as reasonably practicable, the safety and well-being of workers.¹³ The Act also lays down specific requirements regarding cleanliness,¹⁴ adequate ventilation,¹⁵ and precautions against explosive or inflammable dust and gases.¹⁶ Moreover, Section 38 mandates fire precautions,¹⁷ while Section 40B requires the appointment of safety officers in factories employing large numbers of workers.¹⁸

¹⁰ *Supra* Note 7, § 6.

¹¹ *Supra* Note 7, § 8.

¹² *Supra* Note 7, § 9B.

¹³ *Supra* Note 8, § 7A.

¹⁴ *Supra* Note 8, § 11.

¹⁵ *Supra* Note 8, § 13.

¹⁶ *Supra* Note 8, § 37.

¹⁷ *Supra* Note 8, § 38.

¹⁸ *Supra* Note 8, § 40B.

Although the OSHWC Code, 2020, modernizes labor laws and emphasizes the employer's duty to ensure workplace safety, it specifically excludes The Explosives Act of 1884. Nevertheless, its provisions regarding safety in hazardous processes and the promotion of health and welfare standards provide a useful complement to the Explosives Act. In this way, the Code indirectly supports improved working conditions in the firework industry.

State governments have also issued safety protocols tailored to regional firework industries. These guidelines include mandatory fire-fighting equipment, the use of flame-retardant materials, the maintenance of safety distances between sheds, and periodic inspections by factory inspectors. The Andhra Pradesh Government's Safety Protocols emphasize registration and licensing compliance to ensure adherence to national and state safety standards.¹⁹

Hence, the legal framework governing the firework industry in India rests primarily on the Explosives Act, 1884, and the Factories Act, 1948, with supplementary guidance from state-level safety rules. While the OSHWC Code, 2020, strengthens general occupational safety standards, it does not subsume the explosives regulatory regime. Effective implementation, regular inspections, and strict enforcement of these overlapping legal frameworks remain essential for safeguarding workers in this high-risk industry.

3. Judicial Interpretation and Case Law Analysis on Workers' Safety in the Firework Industry

The judicial interpretation of worker safety in India's firework industry reflects an evolving approach toward accountability, compensation, and regulatory enforcement. Courts and tribunals have consistently emphasized the need for strict compliance with safety norms, recognizing the high-risk nature of the industry. Judicial decisions have not only addressed the immediate causes of industrial accidents but also identified systemic deficiencies in monitoring, enforcement, and occupational health

¹⁹ Lanka Venu, AP govt issues tougher safety protocols for fireworks industry, *The Times of India* (Oct. 12, 2025), <https://timesofindia.indiatimes.com/city/vijayawada/ap-govt-issues-tougher-safety-protocols-for-fireworks-industry/articleshow/124485442.cms>.

management.

A significant case highlighting the judicial stance on safety negligence is the National Green Tribunal (NGT) order of 2021 concerning a blast at the Vishal Fireworks factory in Maharashtra. The explosion caused injuries to several workers and exposed violations of multiple safety regulations, including the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, and the Chemical Accidents (Emergency Planning, Response Preparedness and Response) Rules, 1996. The Tribunal found the factory guilty of failing to implement adequate safety measures and imposed liability on the occupier for negligence. Applying the principle of absolute liability for hazardous activities, the NGT directed the payment of compensation to the victims. The decision also underscored lapses by regulatory bodies in enforcing compliance and held both the factory management and the State jointly responsible for their failure to prevent the incident.²⁰

Another major judicial intervention occurred following the Virudhunagar factory blast in Tamil Nadu (2021), where 19 workers were killed and more than 30 sustained severe injuries. The NGT's fact-finding committee revealed serious violations such as unauthorized subleasing of factory premises, exceeding permissible worker limits, improper storage of chemicals, and the absence of certified foremen as required under the Explosives Rules, 2008. The Tribunal imposed compensation on the factory operators, which was later upheld by the Supreme Court, reiterating the doctrine of absolute liability for hazardous industry owners. It also recommended regular inspections and strict adherence to statutory safety standards to prevent similar incidents.²¹ Tribunal relied on this ruling in the matter of In Re: Blast in firework unit in Maharashtra.

The Madras High Court has also contributed significantly to the jurisprudence surrounding firework manufacturing. In *Tamil Nadu Fire Works and Amorcees Manufacturers Association v. State of Tamil Nadu* (2014), the Association challenged amendments that classified firework manufacturing as a hazardous process under Chapter IV-A of the Factories Act, 1948. The Court upheld the amendments, confirming

²⁰ Blast in firecracker unit in Maharashtra, In re, 2021 SCC OnLine NGT 167.

²¹ Virudhunagar Firecracker Factory Blast, In re, 2021 SCC OnLine NGT 156.

that the enhanced safety obligations under Sections 41A to 41H applied to the industry. It highlighted the importance of Schedule XXIV of the Tamil Nadu Factories Rules, 1950, which prescribes safety supervision by certified foremen, regular training, and emergency preparedness plans.²²

Judicial accountability for employer negligence was further reinforced in the ruling of *Rajesh Kumar v. State of Tamil Nadu* by convicting a factory owner after a fire killed two workers. The Court held the proprietor guilty under Sections 88A and 87 of the Factories Act, 1948, for failure to maintain adequate safety measures and to provide training or accident reporting. It clarified that monetary compensation alone cannot absolve criminal responsibility for safety violations, and imposed imprisonment and fines on the employer.²³

Supreme Court's landmark decision in *M.C. Mehta v. State of Tamil Nadu* (1996) remains a foundational precedent. The Court addressed child labor and occupational hazards in Sivakasi's fireworks factories, emphasizing the constitutional prohibition under Article 24 against employing children in hazardous industries. It directed the government to ensure education, healthcare, and welfare measures for affected children and mandated the creation of welfare funds to prevent exploitation. This judgment established a human rights-centered approach to industrial safety and labor regulation in hazardous sectors.²⁴

These judicial pronouncements underscore the critical role of the Courts and Tribunals in enforcing worker safety in India's firework industry. Through principles of absolute liability, mandatory compensation, and criminal accountability, the courts have reinforced the duty of employers and regulators to uphold safety standards. These cases illustrate a growing judicial commitment to ensuring that economic activities do not compromise the health, dignity, and rights of workers employed in hazardous occupations.

4. Implementation Challenges and Enforcement Gaps in the Firework Industry

The firework industry in India struggle with the effective implementation of safety

²² *Tamilnadu Fire Works And Amorcees Manufacturers Association v. The Secretary To Government*, 2014.

²³ *Rajesh Kumar v. State of T.N.*, 2022 SCC OnLine Mad 3089.

²⁴ *M.C. Mehta (Child Labour matter) v. State of T.N.*, (1996) 6 SCC 756.

regulations. Despite comprehensive statutory frameworks under the Factories Act, 1948, Explosives Act, 1884, and Explosives Rules, 2008, compliance remains inconsistent, and enforcement mechanisms are often weak. The consequences of these shortcomings are reflected in frequent accidents that claim the lives of workers and expose the systemic failures of both factory management and regulatory authorities.

A substantial portion of firework manufacturing takes place within small-scale or unregistered units, particularly concentrated in regions such as Sivakasi in Tamil Nadu. These units often function without valid licenses, adequate safety infrastructure, or adherence to zoning and environmental regulations.²⁵

Informal subcontracting and unauthorized sub-leasing of premises are common, allowing factory owners to evade legal responsibility. Production frequently occurs in congested, poorly ventilated spaces with explosive materials stored haphazardly. Untrained workers, including women and sometimes minors, handle hazardous chemicals without gloves, masks, or supervision, exposing themselves to significant risks. The absence of structured safety training, combined with limited awareness of safety norms, contributes to recurring explosions and fires that could have been prevented through minimal precautionary measures.²⁶

Although the Petroleum and Explosives Safety Organisation (PESO) and state labour departments are tasked with monitoring and enforcement, their capacity remains inadequate. Inspections are often irregular, superficial, and poorly documented, while staffing and technical expertise are insufficient to handle the scale of the industry.²⁷ Investigations conducted after major accidents have consistently revealed the absence of fire extinguishers, emergency exits, or first-aid facilities, as well as a lack of compliance with the safety norms prescribed under the *Explosives Rules, 2008*. Despite repeated judicial and tribunal directives calling for strict implementation, enforcement

²⁵Challenges of Firecracker Industry, *Shankar IAS Parliament* (Oct. 31 2023), <https://www.shankariasparliament.com/current-affairs/gs-i/challenges-of-firecracker-industry>.

²⁶Nair Anagha V., *Exploring the Possibility of a Firecracker Free India*, 1 Int'l J. Pol'y Scis. & Law 1209 (Vol. 1, Iss.-3 (2021)), https://ijpsl.in/wp-content/uploads/2021/03/Exploring-the-Possibility-of-a-Firecracker-Free-India_Anagha-V-Nair.pdf.

²⁷Under Fire: The State Must Enforce Compliance of Regulations in the Fireworks Industry, *Civildaily* (July 3 2025), <https://www.civildaily.com/news/under-fire-the-state-must-enforce-compliance-of-regulations-in-the-fireworks-industry/>.

remains largely reactive, with action taken only after tragedies occur.²⁸

Worker awareness and training remain among the weakest aspects of safety compliance. The majority of workers employed in the firework sector come from economically disadvantaged backgrounds and have minimal formal education.²⁹ They often lack understanding of the risks associated with the handling of explosive chemicals and the importance of using protective gear. Safety manuals and warning notices are rarely communicated in local languages, and even where equipment such as gloves or masks is provided, it is often inadequate or not used due to lack of supervision. Fear of job loss prevents workers from raising safety concerns or refusing hazardous work, as they are typically employed on daily wages without job security, insurance, or legal recourse.³⁰ This combination of economic vulnerability and informational disadvantage entrenches unsafe practices within the industry.

5. Case Studies of Firework Industry Accidents

The following case studies show some of the most significant incidents in recent years which reveals persistent issues of non-compliance, lack of training, and systemic negligence despite detailed statutory frameworks and judicial interventions.

i. Konaseema District, Andhra Pradesh Firework Factory Explosion (2025)

On October 8, 2025, a devastating explosion occurred at the Sri Ganapati Grand Fireworks unit in V. Savaram village, Rayavaram mandal, Konaseema district, Andhra Pradesh. The blast claimed seven lives and left several others grievously injured. Preliminary investigations suggested that an electrical short circuit triggered the ignition of highly combustible chemicals. Rescue operations were hindered by the rapid spread of fire. Survivors reported severe burns and permanent disabilities. The tragedy prompted immediate government response

²⁸ *Supra* Note 4.

²⁹ Muthu Arul S., Problems of Employees in Firework Industries with Special Reference to Sattur Taluk, 20 Int'l J. Neuro-Quantology 4691 (Dec. 2022), https://www.neuroquantology.com/open-access/PROBLEMS+OF+EMPLOYEES+IN+FIREWORK+INDUSTRIES+WITH+SPECIAL+REFERENCE+TO+SATTUR+TALUK_14731/?download=true

³⁰ *Supra* Note 27.

and compensation announcements.³¹

ii. Sivakasi, Tamil Nadu Firework Factory Blast (2025)

Sivakasi which is often referred to as India's "fireworks capital," witnessed another major tragedy on July 1, 2025. Blast occurred at Gokules Fireworks, licensed factory in Chinna Kamanpatti village, Virudhunagar district. The blast, which occurred during chemical mixing operations, killed eight workers and injured several others. Eyewitness accounts and preliminary reports linked the explosion to unsafe handling of chemicals and violation of prescribed safety protocols. Many injured workers suffered burns and respiratory complications, reflecting inadequate ventilation and poor hazard control.³²

iii. Virudhunagar District Firework Factory Explosion (2021)

The 2021 explosion at the Sree Mariammal Fireworks Factory in Achangulam village, Virudhunagar district, remains one of the deadliest in the history of Tamil Nadu's fireworks industry. The tragedy resulted in the deaths of 19 workers and injuries to more than 30 others. Investigations exposed widespread violations, including unauthorized subleasing of premises, employment of workers beyond sanctioned limits, and unsafe storage of explosive chemicals contrary to the Explosives Rules, 2008.³³

The National Green Tribunal (NGT) intervened to direct compensation to victims' families and called for strict enforcement of safety laws. However, several victims' families have reported delays and non-payment of compensation which underscores persistent gaps in accountability and restitution. Survivors such as Muthukutti, who lost his leg in the explosion,

³¹ Rao Jinnala Umamaheswara, *Seven killed in blast at fire-cracker unit in Andhra Pradesh's Konaseema district*, *The Times of India* (Oct. 9 2025), <https://timesofindia.indiatimes.com/city/vijayawada/seven-killed-in-blast-at-firecracker-unit-in-andhra-pradeshs-konaseema-district/articleshow/124398164.cms>.

³² Preeja Aravind, *Blast at firecracker factory in Tamil Nadu's Sivakasi, 8 dead* (July 1 2025), *India Today*, <https://www.indiatoday.in/india/south/story/blast-at-firecracker-factory-in-tamil-nadu-sivakasi-workers-dead-several-injured-ambulance-rescue-operations-2748737-2025-07-01>.

³³ Azeefa Fathima, *At least 19 dead in Virudhunagar firecracker factory blast, more than 30 injured*, *The New Indian Express* (Feb. 12 2021), <https://www.newindianexpress.com/states/tamil-nadu/2021/Feb/12/at-least-18dead-in-virudhunagar-firecracker-factory-blast-more-than-30injured-2263148.html>.

continue to struggle with disability, medical expenses, and economic distress.³⁴ The Virudhunagar tragedy epitomizes the recurring enforcement failures and inadequate adherence to judicial directives intended to protect vulnerable workers.

iv. Gujarat Firework Factory Fire Accident (2025)

A massive explosion at the Deepak Firework Factory in Banaskantha, Gujarat, on April 1, 2025, killed 21 workers, including eight children, and injured several others. The victims were mostly migrant labourers from Madhya Pradesh, who worked and lived inside the factory premises under unsafe and exploitative conditions. The factory was operating without a valid licence to manufacture explosives, in clear violation of the Explosives Act, 1884 and safety provisions under the Occupational Safety, Health and Working Conditions Code, 2020. Workers were reportedly paid on a piece-rate basis, between ₹500 to ₹1,000 for every box filled, indicating a lack of formal employment contracts and disregard for minimum wage, age, and safety regulations.³⁵

Authorities later arrested the factory owner and his son, while both the State and Central governments announced ex-gratia payments to the victims' families. However, the tragedy reflects severe labour law violations, including the employment of child labour, absence of workplace safety standards, and failure to obtain or renew manufacturing licences. The explosion, caused by unsafe storage of aluminium powder and yellow dextrin, exposed systemic negligence and poor enforcement of labour and safety laws. This incident underscores the urgent need for stricter inspections, regulation of small-scale firework units, and better protection for migrant and unorganised workers.³⁶

These incidents reveal a clear pattern of negligence, poor enforcement, and labour law violations in the firework industry. Despite detailed safety laws, factories continue to

³⁴ Thiagarajan Kamala, *Fireworks and Heartbreak in a Hard-Hit Indian Village*, *Global Health NOW* (Apr. 15 2025), <https://globalhealthnow.org/2025-04/fireworks-and-heartbreak-hard-hit-indian-village>.

³⁵ Lakshman Abhinay, *Gujarat firecracker factory blaze: Smoke and a mirror to society*, *The Hindu* (Apr. 5 2025), <https://www.thehindu.com/news/national/gujarat/gujarat-firecracker-factory-blaze-smoke-and-a-mirror-to-society/article69414358.ece>.

³⁶ *Supra* Note 35.

operate without licences, training, or safety measures. Most victims are migrant or child workers. This shows deep-rooted exploitation. Stronger inspections, stricter accountability, and better protection for vulnerable workers are needed to prevent such tragedies.

• Conclusion and recommendations

The firework industry in India remains a vital source of livelihood but also one of the most dangerous occupational sectors. It employs thousands of workers across Tamil Nadu, Andhra Pradesh, and Gujarat, yet exposes them daily to explosive and flammable materials. Most factories are cramped, poorly ventilated, and lack safety equipment or proper training. Frequent explosions and fires reveal how economic gains often outweigh worker safety, highlighting the urgent need for stronger and more humane safety measures.

Although India's legal framework which comprising the Explosives Act, 1884, the Factories Act, 1948, and the Occupational Safety, Health and Working Conditions Code, 2020 sets clear safety standards, enforcement remains weak. Many small and informal units operate without valid licenses, evade inspections, and ignore safety rules due to financial or administrative neglect. Regulatory bodies suffer from manpower shortages and poor coordination, allowing dangerous practices to continue unchecked. As a result, legal protections often remain limited to paper, while workers bear the brunt of preventable tragedies.

To improve safety outcomes, a comprehensive strategy is required that strengthens both preventive and responsive mechanisms. Authorities must ensure regular inspections, strict licensing, and the use of modern monitoring systems to track compliance. Employers should be obligated to provide continuous safety training, personal protective equipment, and medical facilities for all workers. State governments should establish dedicated crisis management and rehabilitation units to support victims of industrial accidents. Public awareness campaigns and worker education programs can empower laborers to recognize and report unsafe practices. Ultimately, improving safety in the firework industry demands not only legal reforms but a cultural shift toward prioritizing human life over production targets, transforming the industry into one that upholds both livelihood and life.