

DECODING INDIA'S BUS FIRES

WHAT 606 INCIDENTS REVEAL

An independent review of media reports reveals recurring operating patterns, multi-bus exposure and the need to turn every serious fire into verified preventive action.

By Dr. V. Amudhan



An independent review of national, regional and local media reports identified 606 bus-fire incidents involving 759 buses in India between 1 January 2021 and 30 June 2026. The incidents were associated with 303 reported fatalities and 1,131 reported injuries.

These figures are not comprehensive official statistics. They represent incidents identifiable through the reviewed media reports. Even with that limitation, the scale and recurring patterns support a clear conclusion - serious bus fires must lead to systematic investigation, verified corrective action, and shared preventive learning.

INDIA'S BUS-FIRE SAFETY SNAPSHOT

1 January 2021–30 June 2026



Most documented incidents caused no reported fatality or injury, but a smaller group produced severe human consequences.

Figure 1 | The identified incidents show a substantial national burden, but the totals are media-reported and should not be treated as comprehensive official statistics.

SIX REGIONS, UNEVEN CONCENTRATION

	Incidents	Buses Involved	Share of Incidents
North	167	211	27.6%
South	165	205	27.2%
West	117	127	19.3%
East	85	114	14.0%
Central	51	73	8.4%
Northeast	21	29	3.5%
TOTAL	606	759	100%

STATES APPEARING MOST FREQUENTLY

	Incidents	Buses Involved
1 Maharashtra	82	88
=2 Tamil Nadu	44	65
=2 Uttar Pradesh	44	57
4 Madhya Pradesh	37	51
5 Telangana	36	38

Figure 2 | North and South formed the two largest regional concentrations; Maharashtra recorded the highest absolute state total.

A national burden with serious human consequences

Of the 606 incidents, 504 (83.2%) had no reported fatality or injury. Early warning, rapid evacuation, emergency response or favourable circumstances may have limited the consequences in many cases, although the media reports do not always establish which safeguards proved decisive.

The remaining incidents nevertheless produced a substantial human toll.

Catastrophic outcomes can emerge when fire growth combines with collision damage, delayed detection, constrained exits, sleeping passengers, combustible materials, or delayed rescue. Case-level investigation is needed to determine which factors were present and how they interacted.

Where incidents were concentrated

The incidents were distributed across India, but not evenly. North India recorded 167 incidents involving 211 buses, while South India recorded 165 incidents involving 205 buses.

Together, the two regions accounted for 332 incidents - 54.8% of the national total. West India recorded 117 incidents, East India 85, Central India 51, and Northeast India 21.

Maharashtra had the highest absolute state total, with 82 incidents and 88 buses involved. Tamil Nadu

and Uttar Pradesh followed with 44 incidents each. These are concentrations of identified reports, not exposure-adjusted risk rankings. Fair comparison would require fleet size, vehicle kilometres, trips, operating hours, fleet age, service intensity and consistent reporting coverage - denominators that were unavailable.

When and where the fires developed

Operating circumstances provide the first layer of evidence. In-motion fires accounted for 396 incidents - 65.3% of the total. Collision-induced fires formed the second-largest category, with 62 incidents involving 71 buses.

The difference between incidents and buses matters most in premises-based events. Thirty-nine depot or parking-area incidents involved 134 buses, while 13 workshop or maintenance incidents involved 41 buses.

One event can therefore expose several vehicles. Do not count additional buses as separate incidents, or assume they were destroyed without incident-level confirmation.

Origin zones reveal a major evidence gap

In 150 incidents - 24.8% of the total - the first-reported fire-origin zone remained undetermined.

Among identified physical zones, the engine compartment led with 139 incidents, followed by electrical or wiring compartments with 83, wheel,

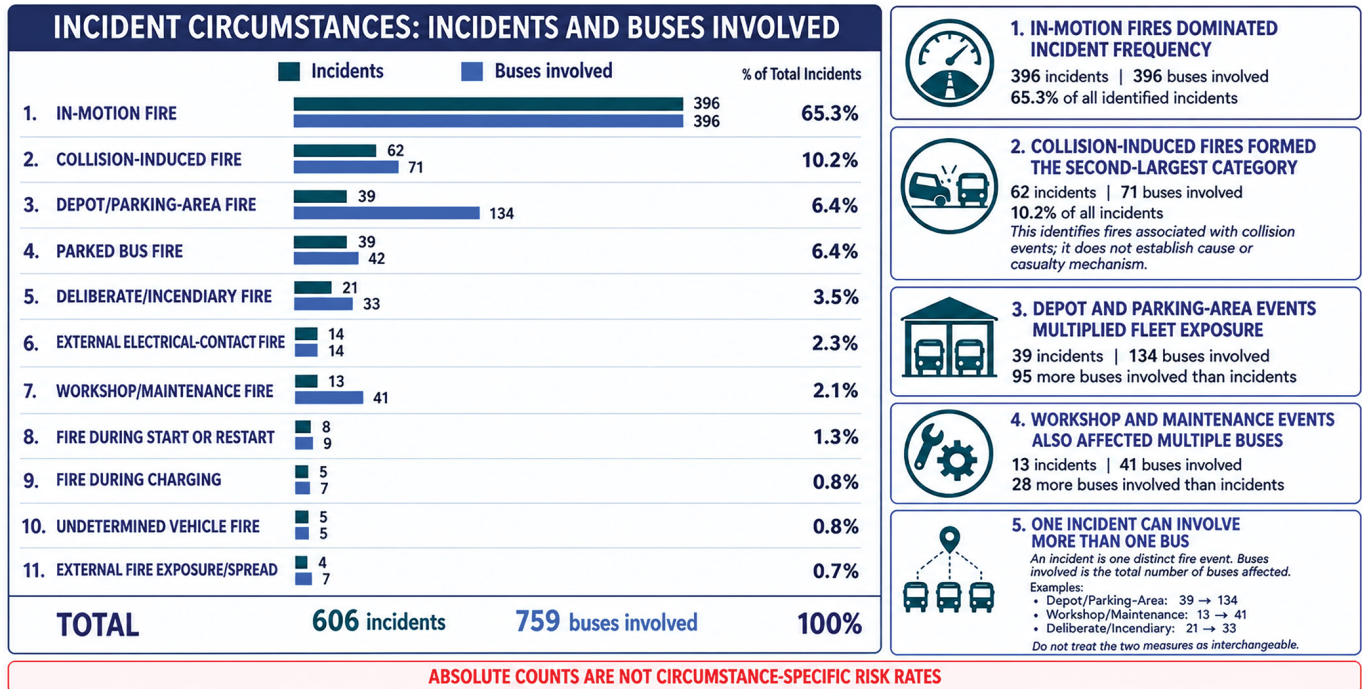


Figure 3 | In-motion fires dominated incident frequency, while depot and workshop events created disproportionate multi-bus exposure.

brake or tyre areas with 52, and fuel-system or fuel-tank zones with 39.

A reported origin zone is not automatically the ignition point. Witnesses may first see smoke or flames after heat has travelled from another location. Origin describes where fire was first reported; root cause explains why it started and developed. That distinction must survive every headline, caption, and technical discussion.

What the classifications reveal

The reviewed reports produced 13 fire classifications. Electrical-System Fire was the largest, with 195 incidents and 207 buses involved. The label does not mean “electric-bus fire”, nor does it establish defective wiring as a confirmed root cause. Diesel, CNG and electric buses all contain electrical systems, and EV Traction-Battery Fire was recorded separately.

Undetermined Vehicle Fire was the second-largest classification, with 126 incidents involving 192 buses. Its scale is a warning about evidence quality. Descriptions such as “short circuit” or “technical fault” may originate from witnesses, operators, police accounts, or preliminary observations. They should not be treated as forensic conclusions unless supported by systematic technical investigation.

Different Evidence Calls for Different Interventions

No state led every measure, and absolute incident totals cannot establish comparative risk.

However, the documented patterns indicate different screening priorities. Maharashtra and

Uttar Pradesh may warrant broad examination because of incident frequency and reported human consequences, while Rajasthan and Andhra Pradesh may require closer examination of severe-outcome incidents, including collision-fire development, evacuation, and post-crash rescue.

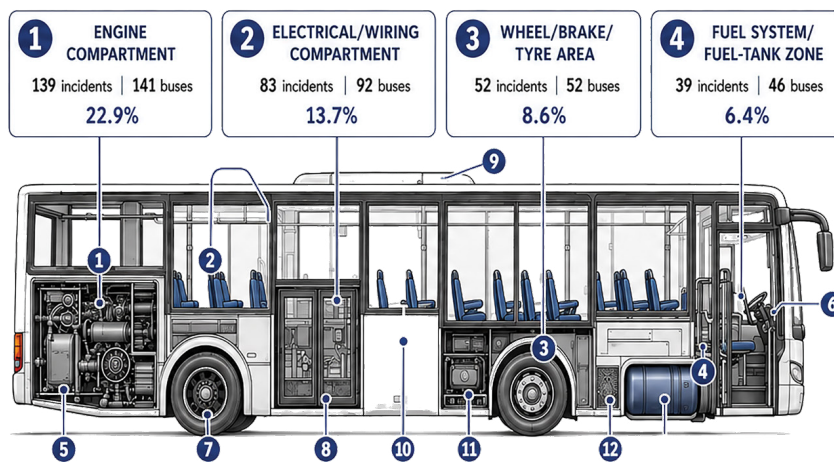
Tamil Nadu, Telangana, Madhya Pradesh and Karnataka may benefit from frequency-focused prevention, while Odisha, Haryana and Gujarat warrant continued targeted monitoring. These are author-proposed screening priorities—not official state-risk classifications—and must be validated against official incident records, fleet exposure and operational data before regulatory action.

Seven national actions for consideration

The evidence strengthens the case for a coordinated national framework. Seven actions merit policy consideration:

- Establish a national bus-fire incident database.
- Introduce a standard bus-fire investigation protocol.
- Conduct safety audits in states with substantial documented burdens.
- Audit electrical systems and post-registration modifications.
- Audit depot, workshop and parking-area fire safety.
- Develop exposure-based indicators using fleet size, kilometres, age, propulsion and service.
- Publish verified findings, safety advisories and corrective lessons.

IDENTIFIED PHYSICAL ORIGIN ZONES



OTHER IDENTIFIED PHYSICAL ZONES					
5	LOW-VOLTAGE BATTERY COMPARTMENT	15 incidents 17 buses 2.5%	9	ROOF/HVAC/ROOF-MOUNTED EQUIPMENT	11 incidents 11 buses 1.8%
6	DRIVER CABIN/DASHBOARD	14 incidents 14 buses 2.3%	10	UNDERBODY/CHASSIS	7 incidents 7 buses 1.2%
7	HIGH-VOLTAGE TRACTION-BATTERY COMPARTMENT	13 incidents 15 buses 2.1%	11	TRANSMISSION/GEARBOX COMPARTMENT	4 incidents 4 buses 0.7%
8	PASSENGER CABIN	12 incidents 12 buses 2.0%	12	LUGGAGE COMPARTMENT	1 incident 1 bus 0.2%

OUTSIDE, MULTIPLE OR UNRESOLVED ORIGINS

CATEGORY	INCIDENTS (count)	BUSES (count)	% OF TOTAL INCIDENTS
A UNDETERMINED	150 incidents	194 buses	24.8%
B EXTERNAL SOURCE	36 incidents	58 buses	5.9%
C UNCLEAR/CONFLICTING EVIDENCE	14 incidents	35 buses	2.3%
D DEPOT/WORKSHOP AREA	8 incidents	34 buses	1.3%
E MULTIPLE/PROPAGATED ZONES	7 incidents	11 buses	1.2%
F WORKSHOP/HOT-WORK AREA	1 incident	15 buses	0.2%

1 THE LARGEST REPORTED ORIGIN CATEGORY WAS UNDETERMINED

150 incidents | 194 buses involved

24.8%

of all identified incidents

2 AMONG IDENTIFIED PHYSICAL ZONES, THE ENGINE COMPARTMENT LED

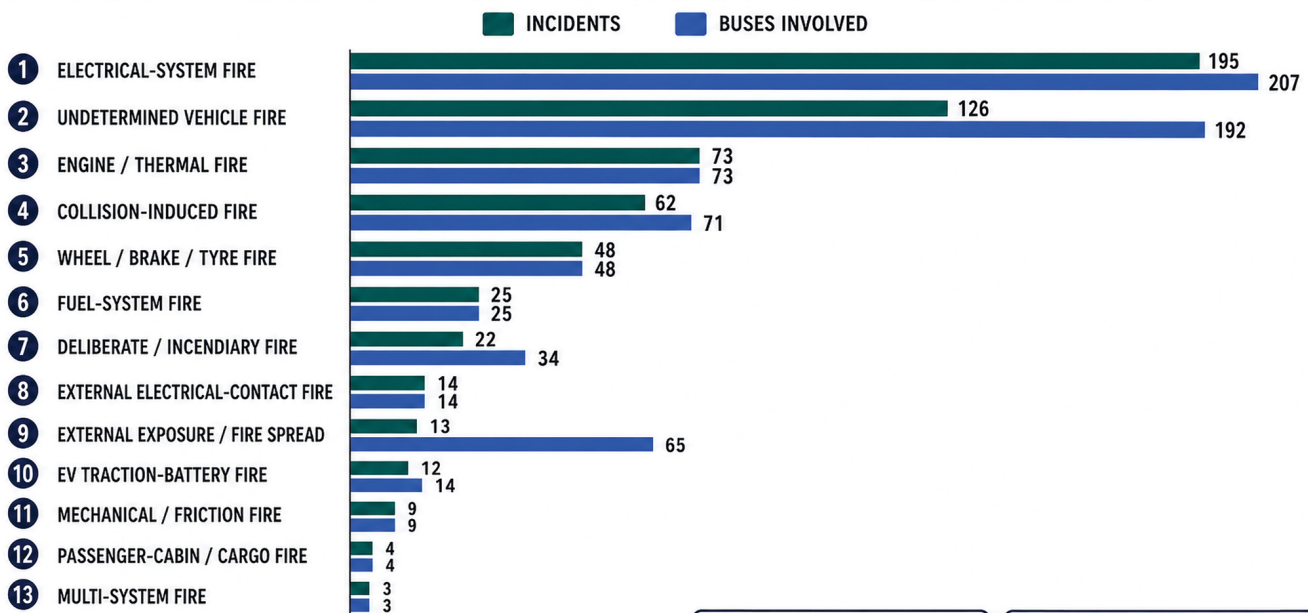
139 incidents | 141 buses involved

22.9%

of all identified incidents

Reported origin is not confirmed root cause. Reported origin identifies where fire was first observed or described; it does not establish the ignition source or failure mechanism.

FIRE CLASSIFICATION: INCIDENTS AND BUSES INVOLVED



GRAND TOTAL: 606 INCIDENTS | 759 BUSES INVOLVED

LARGEST REPORTED CLASSIFICATION
ELECTRICAL-SYSTEM FIRE
195 INCIDENTS | 207 BUSES

SUBSTANTIAL SHARE REMAINED UNDETERMINED
UNDETERMINED VEHICLE FIRE
126 INCIDENTS | 192 BUSES

Classification is not confirmed root cause. Media-reported classifications may be preliminary; only a technical or forensic investigation can establish the cause.

About the Analysis: This independent analysis reviewed national, regional and local media reports published between 1 January 2021 and 30 June 2026. Each identified event was counted as one incident; where one event affected several buses, the number of buses involved was recorded separately. Where reports differed, the most consistently supported available figure was used. Casualty totals include all persons reported as affected. The findings represent identifiable media-reported patterns and are not comprehensive official national statistics.

SEVEN PROPOSED NATIONAL ACTIONS

#	ACTION	PROPOSED LEAD	SUPPORTING INSTITUTIONS	PROPOSED TIMEFRAME	REQUIRED OUTPUT
1	NATIONAL BUS-FIRE INCIDENT DATABASE	MoRTH	NIC + State/UT Transport Departments	IMMEDIATE INITIATION	Standard digital reporting platform
2	STANDARD BUS-FIRE INVESTIGATION PROTOCOL	MoRTH	Technical/testing agencies + States + police and fire services	IMMEDIATE INITIATION	Uniform investigation procedure
3	HIGH-BURDEN STATE SAFETY AUDITS	MoRTH + concerned States	Transport Departments + STUs + operators + audit teams	3–6 MONTHS	State findings and corrective-action plans
4	ELECTRICAL AND POST-REGISTRATION MODIFICATION AUDITS	State/UT Transport Departments	Testing agencies + manufacturers + body builders + operators	3–6 MONTHS	Verification of wiring, auxiliary loads and alterations
5	DEPOT, WORKSHOP AND PARKING-AREA FIRE-SAFETY AUDITS	STUs + bus operators	Transport Departments + fire services + local authorities	WITHIN 6 MONTHS	Depot fire-risk register and emergency plan
6	EXPOSURE-BASED BUS-FIRE INDICATORS	MoRTH	States + STUs + operators + registration and statistical agencies	WITHIN 12 MONTHS	Rates by registered buses, bus-kilometres, age, propulsion and service
7	PUBLICATION OF FINDINGS AND SAFETY LEARNING	MoRTH	States + investigators + manufacturers + operators + technical institutions	ANNUAL AND INCIDENT-BASED	Annual report and major-incident advisories

Colours indicate the proposed implementation sequence—not urgency ratings or statutory deadlines.

MoRTH: Ministry of Road Transport and Highways | NIC: National Informatics Centre | STUs: State Transport Undertakings | State/UT: State or Union Territory



AUTHOR-PROPOSED ROADMAP—NOT AN ANNOUNCED GOVERNMENT PLAN

The institutional roles, timeframes and outputs are proposed for policy consideration; they are not confirmed assignments, statutory deadlines or approved government commitments.

MoRTH could provide national coordination, supported by State and Union Territory transport departments, the National Informatics Centre, testing agencies, police, fire services, State Transport Undertakings, operators, manufacturers, body builders and technical institutions.

These roles and timeframes are author proposals for policy consideration - not announced commitments, statutory deadlines or approved government assignments.

From reporting to preventive learning

A national database is necessary, but reporting alone will not prevent the next fire. Investigation must distinguish operating circumstances, reported origin, fire classification and root cause. Corrective action must then be assigned, completed and

independently verified. Verified findings should inform vehicle design, maintenance, inspection, evacuation, emergency response and training. An investigation should not end with administrative file closure.

It should end with evidence that the corrective action is complete, effective and sustained - and with lessons shared across the bus system.

Counting fires establishes the scale of the problem. Prevention begins when investigation leads to corrective action, independent verification and shared learning. Only then can the lessons from one fire help prevent the next.

About The Author

Dr. V Amudhan is a Global Public Transit Governance Expert with over 33 years of experience in public transport, mobility governance and transport safety across India and abroad. He serves as an Independent Director and Governing Board Member in multiple Indian State Transport Undertakings and is a widely published thought leader on sustainable mobility, predictive maintenance, transit safety, and transport policy reforms.

