

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
UNSTARRED QUESTION NO.1823
TO BE ANSWERED ON 10.12.2025**

IMPROVED RAILWAY INFRASTRUCTURES

†1823. SHRI LALJI VERMA:

Will the Minister of RAILWAYS be pleased to state:

- (a) the steps taken/being taken by the Government to improve railway infrastructures in view of the various train accidents occurred in the year 2024;**
- (b) whether the Government has found out any specific flaws/shortcomings in existing safety systems and if so, the measures taken/being taken to mitigate them;**
- (c) the scheme of the Government to fill the 1.5 lakh vacancies in the railway security category and whether the recruitment of adequate skilled frontline security personnel is being ensured; and**
- (d) the timeline and strategy for recruiting and training of security personnel to improve the safety and reliability of railway operations?**

ANSWER

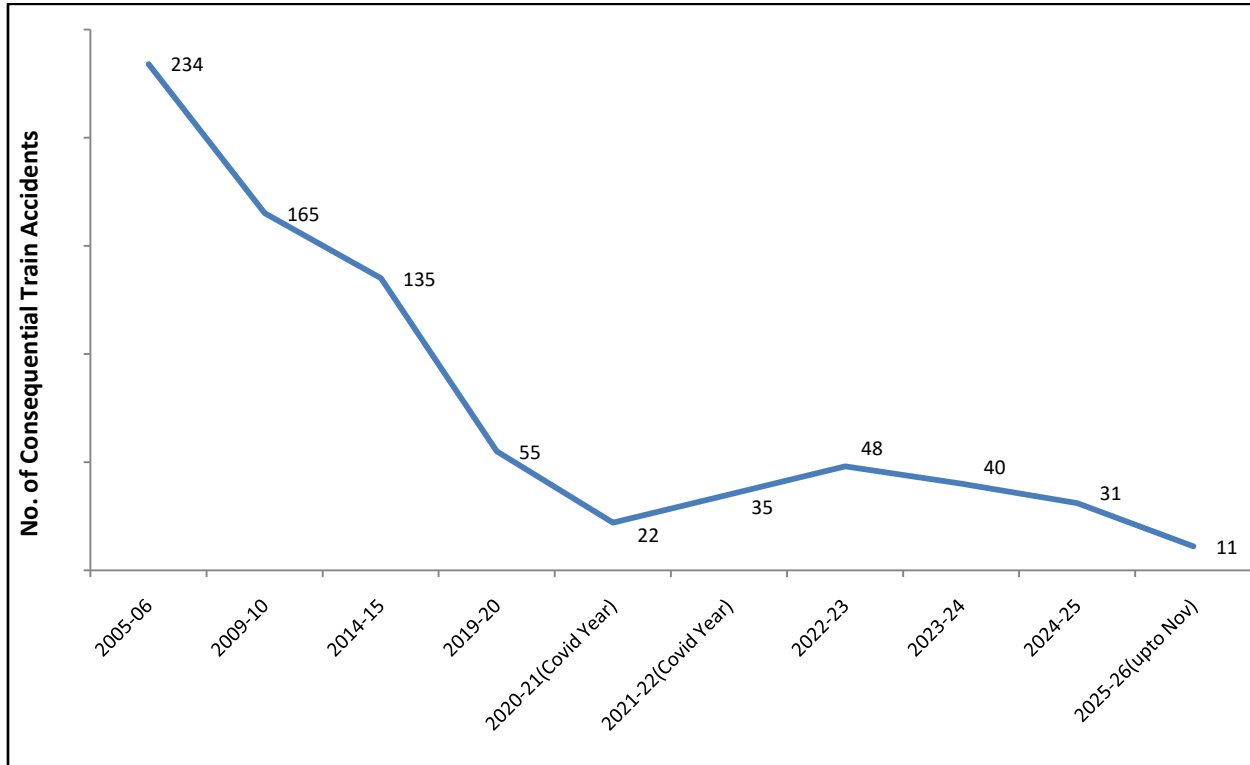
**MINISTER OF RAILWAYS, INFORMATION & BROADCASTING AND
ELECTRONICS & INFORMATION TECHNOLOGY**

(SHRI ASHWINI VAISHNAW)

(a) to (d): Safety is accorded the highest priority on Indian Railways. As a consequence of various safety measures taken over the years, there has been a steep decline in the number of accidents. Consequential Train Accidents have reduced from 135 in 2014-15 to 31 in 2024-25 as shown in the graph below.

It may be noted that the Consequential Train Accidents during the period 2004-14 was 1711 (average 171 per annum), which has declined to 31 in 2024-25 and further to 10 in 2025-26 (upto November 2025).

Another important index showing improved safety in train operations is Accidents Per Million Train Kilometer (APMTKM) which has reduced from 0.11 in 2014-15 to 0.03 in 2024-25, indicating an improvement of approx. 73% during the said period.



Each Rail accident is inquired into either by the Commission of Railway Safety, a statutory body under Ministry of Civil Aviation or by the Railway Departmental Inquiry Committees as per laid down norms. Appropriate action is taken by the respective Railway administration on the recommendations suggested by the agencies in their report.

The various safety measures taken to enhance safety in train operations are as under:-

1. On Indian Railways, the expenditure on Safety related activities has increased over the years as under:-

Expenditure/Budget on Safety related activities (Rs. in Cr.)				
2013-14 (Act.)	2022-23 (Act.)	2023-24 (Act.)	2024-25	2025-26
39,463	87,327	1,01,651	1,14,022	1,16,470

- 2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6,656 stations up to 31.10.2025 to reduce accident due to human failure.**
- 3. Interlocking of Level Crossing (LC) Gates has been provided at 10,098 Level Crossing Gates up to 31.10.2025 for enhancing safety at LC Gates.**
- 4. Complete Track Circuiting of stations to enhance safety by verification of track occupancy by electrical means has been provided at 6,661 stations up to 31.10.2025.**
- 5. Kavach is a highly technology intensive system, which requires safety certification of highest order. Kavach was adopted as a National ATP system in July 2020. Kavach is provided progressively in phased manner. Initially, Kavach Version 3.2 was deployed on 1465 RKm of South Central Railway and 80 RKm of North Central Railway. Kavach specification Version 4.0 was approved by RDSO on 16.07.2024. After extensive and elaborate trials, Kavach Version 4.0 has been successfully commissioned on Palwal-Mathura-Kota-Nagda section (633 Rkm) on Delhi-Mumbai route and on Howrah-Bardhaman section (105 RKm) on Delhi-Howrah route. Kavach implementation has been taken up in balance sections of Delhi-Mumbai and Delhi-Howrah route. Further, Kavach implementation has been taken up on 15,512 RKm covering all GQ, GD, HDN and identified sections of Indian Railways.**
- 6. Detailed instructions on issues related with safety of Signalling, e.g. mandatory correspondence check, alteration work protocol, preparation of completion drawing, etc. have been issued.**

- 7. System of disconnection and reconnection for S&T equipment as per protocol has been re-emphasized.**
- 8. All locomotives are equipped with Vigilance Control Devices (VCD) to improve alertness of Loco Pilots.**
- 9. Retro-reflective sigma boards are provided on the mast which is located two OHE masts prior to the signals in electrified territories to alert the crew about the signal ahead when visibility is low due to foggy weather.**
- 10. A GPS based Fog Safety Device (FSD) is provided to loco pilots in fog affected areas which enables loco pilots to know the distance of the approaching landmarks like signals, level crossing gates, etc.**
- 11. Modern track structure consisting of 60kg, 90 Ultimate Tensile Strength (UTS) rails, Prestressed Concrete Sleeper (PSC) Normal/Wide base sleepers with elastic fastening, fan shaped layout turnout on PSC sleepers, Steel Channel/H-beam Sleepers on girder bridges is used while carrying out primary track renewals.**
- 12. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc. to reduce human errors.**
- 13. Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby improving safety.**
- 14. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.**
- 15. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e., Flash Butt Welding.**
- 16. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).**
- 17. Patrolling of railway tracks to look out for weld/rail fractures.**
- 18. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.**
- 19. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.**

- 20. Web based online monitoring system of track assets viz. Track database and decision support system has been adopted to decide rationalized maintenance requirement and optimize inputs.**
- 21. Detailed instructions on issues related with safety of Track, e.g. integrated block, corridor block, worksite safety, monsoon precautions, etc. have been issued.**
- 22. Preventive maintenance of railway assets (Coaches & Wagons) is undertaken to ensure safe train operations.**
- 23. Replacement of conventional ICF design coaches with LHB design coaches is being done.**
- 24. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.**
- 25. Safety of Railway Bridges is ensured through regular inspection of Bridges. The requirement of repair/rehabilitation of Bridges is taken up based upon the conditions assessed during these inspections.**
- 26. Indian Railways has displayed Statutory “Fire Notices” for widespread passenger information in all coaches. Fire posters are provided in every coach so as to educate and alert passengers regarding various Do’s and Don’ts to prevent fire. These include messages regarding not carrying any inflammable material, explosives, prohibition of smoking inside the coaches, penalties etc.**
- 27. Production Units are providing Fire detection and suppression system in newly manufactured Power Cars and Pantry Cars, Fire and Smoke detection system in newly manufactured coaches. Progressive fitment of the same in existing coaches is also underway by Zonal Railways in a phased manner.**
- 28. Regular counselling and training of staff is undertaken.**
- 29. Concept of Rolling Block introduced in Indian Railways (Open Lines) General Rules vide Gazette notification dated 30.11.2023, wherein work of integrated maintenance/repair/replacement of assets is planned up to 52 weeks in advance on rolling basis and executed as per plan.**

The details of the Safety related works related to better maintenance practices, Technological improvements, better infrastructure and rolling stock etc. undertaken by Railways are tabulated below:-

S.N.	Item	2004-05 to 2013-14	2014-15 to 2024-25	2014-25 Vs. 2004-14
Technological Improvements				
1.	Use of high-quality rails (60 Kg) (Km)	57,450 Km	1.43 Lakh Km	More than 2 times
2.	Longer Rail Panels (260m) (Km)	9,917 Km	77,522 Km	Nearly 8 times
3.	Electronic Interlocking (Stations)	837 Stations	3,691 Stations	More than 4 times
4.	Fog Pass Safety Devices (Nos.)	As on 31.03.14: 90 Nos.	As on 31.03.25: 25,939 Nos.	288 times
5.	Thick Web Switches (Nos.)	Nil	28,301 Nos.	
Better Maintenance Practices				
1.	Primary Rail Renewal (Track Km)	32,260 Km	49,941 Km	1.5 times
2.	USFD (Ultra Sonic Flaw detection) Testing of Welds (Nos.)	79.43 Lakh	2 Cr.	More than 2 times
3.	Weld failures (Nos.)	In 2013-14: 3699 Nos.	In 2024-25: 370 Nos.	90 % reduction
4.	Rail fractures (Nos.)	In 2013-14: 2548 Nos.	In 2024-25: 289 Nos.	More than 88% reduction
Better Infrastructure and Rolling Stock				
1.	New Track KM added (Track Km)	14,985 Km	34,428 Km	More than 2 times
2.	Flyovers (RoBs)/ Underpasses (RUBs) (Nos.)	4,148 Nos.	13,808 Nos.	More than 3 times
3.	Unmanned Level crossings (Nos.) on BG	As on 31.03.14: 8,948	As on 31.03.24: Nil (All eliminated by 31.01.19)	Removed
4.	Manufacture of LHB Coaches (Nos.)	2,337 Nos.	42,677	More than 18 times

Occurrence and filling up of vacancies are continuous processes on Indian Railways considering its size, spatial distribution and criticality of operation. Adequate and suitable manpower is provided to cater to the regular operations, changes in technology, mechanisation and innovative practices. The vacancies are filled up primarily by placement of indents by Railways with Recruitment agencies as per operational and technological requirements.

Presently, recruitment of 1,20,579 vacancies has been taken up on Indian Railways as per Annual Calendar 2024 and 2025.

During January to December 2024, ten Centralized Employment Notifications (CENs) for 92,116 vacancies were notified for filling up the posts of Assistant Loco Pilots (ALPs), Technicians, Sub-Inspectors, Constables in Railway Protection Force (RPF), Junior Engineers (JEs)/ Depot Material Superintendent (DMS)/Chemical & Metallurgical Assistant (CMA), Paramedical Categories, Non-Technical Popular Categories (Graduate), Non-Technical Popular Categories (Under-Graduate), Ministerial & Isolated Categories and Level-1 Categories such as Assistants, Track Maintainers and Pointsman.

First stage/Single stage Computer Based Tests (CBTs) for 59,678 posts has been completed. Details are as under:-

Exam	Candidates	Cities	Languages
1st Stage CBT for the post of ALP (18,799 vacancies)	18,40,347	156	15
CBT for the post of Technician (14,298 vacancies)	26,99,892	139	15
1st Stage CBT for the post of JE/DMS/CMA (7,951 vacancies)	11,01,266	146	15
CBT for the post of RPF-SI (452 vacancies)	15,35,635	143	15
CBT for the post of RPF-Constable (4,208 vacancies)	45,30,288	147	15

CBT for Paramedical Categories (1,376 vacancies)	7,08,321	143	15
1st Stage CBT for Non-Technical Popular Categories (Graduate) (8,113 vacancies)	58,41,774	141	15
1st Stage CBT for Non-Technical Popular Categories (Under Graduate) (3,445 vacancies)	63,27,473	157	15
CBT for Ministerial & Isolated Categories (1,036 vacancies)	4,46,013	139	15
Total number of candidates	2,50,31,009		

2nd stage CBTs for the posts of ALP, JE/DMS/CMA and Non-Technical Popular Categories (Graduate) has also been completed. Details are as under: -

Exam	Candidates	Cities	Languages
2nd Stage CBT for the post of ALP (18,799 vacancies)	2,66,363	112	15
2nd Stage CBT for the post of JE/DMS/CMA (7,951 vacancies)	1,17,339	118	15
2nd Stage CBT for Non-Technical Popular Categories (Graduate) (8,113 vacancies)	1,21,931	129	15
Total number of candidates	5,05,633		

Computer Based Aptitude Test (CBAT) for the post of ALP has also been completed. Details are as under:-

Exam	Candidates	Cities	Languages
CBAT for the post of ALP (18,799 vacancies)	1,32,044	84	2

CBT for 32,438 vacancies for level-1 Categories has commenced from 27.11.2025 in 140 cities in 15 languages. Physical Efficiency Test (PET) for 4,208 vacancies of Constable (RPF) has commenced from 13.11.2025.

Panels for more than 23,000 candidates for various posts including the posts of Technicians, Junior Engineers, Paramedical Categories, Sub-Inspectors (RPF) and Assistant Loco Pilots have been finalised. Majority of them are in safety categories.

In addition, as per Annual Calendar for the year 2025, seven Centralized Employment Notifications (CENs) for 28,463 vacancies have also been issued. Details are as under:-

S. No.	CEN No.	Post Name	No. of Vacancies notified	Month of Notifications
1.	01/2025	Assistant Loco Pilots	9,970	March 2025
2.	02/2025	Technicians	6,238	June 2025
3.	03/2025	Para-Medical Categories	434	July 2025
4.	04/2025	Section Controllers	368	August 2025
5.	05/2025	Junior Engineers / Depot Material Superintendent	2,585	October 2025
6.	06/2025	Non-Technical Popular Categories (Graduate)	5,810	October 2025
7.	07/2025	Non-Technical Popular Categories (Under-Graduate)	3,058	October 2025

The RRB examinations are quite technical in nature entailing large scale mobilization of men and resources and training of manpower. Railway overcame all these challenges and successfully conducted the recruitment in a transparent manner following all laid down guidelines. No instance of paper leakage or similar malpractice has occurred during the entire process.

Recruitment done in Indian Railways during 2004-2005 to 2013-2014 vis-à-vis during 2014-2015 to 2024-2025 is given as under :-

Period	Recruitments*
2004-2005 to 2013-2014	4.11 lakh
2014-2015 to 2024-2025	5.08 lakh

***Including Level-1 and Security related posts.**

Further, as system improvement, the Ministry of Railways has introduced a system of publishing the annual calendar from 2024 for recruitment to various categories of Group 'C' posts. The introduction of the annual calendar is benefitting the aspirants in the following manner:-

- More opportunities for candidates;**
- Opportunities to those becoming eligible every year;**
- Certainty of exams;**
- Faster Recruitment process, Training and Appointments;**

As Safe train operation is the top most priority of Indian Railways, special emphasis is laid on the training of safety category employees. Detailed training modules including on Kavach system, as per prescribed periodicity, are available for respective categories at initial and promotional stages along with refresher courses as well as specialized training courses, laying emphasis on practical aspects which help them in skill upgradation and assimilation with related advanced technology, keeping a focus on overall safety and passenger experience. These modules are also updated keeping in view the technological changes in working practice.

Training Centres located all over Indian Railways impart various types of trainings, i.e., Initial, Promotional, Refresher & Specialized.

Initial Training:- for the purpose of introducing the new entrants to the various facets of Railway operations and management.

Promotional Training:- for the purpose of preparing serving staff in advance for jobs of higher responsibilities.

Refresher Training:- for the purpose of refreshing the serving employees periodically with new ideas and principles for improving efficiency in their jobs.

Specialized Training:- for the purpose of updating the knowledge of technological developments, quantitative techniques, etc. e.g., PRS, new locomotives, signaling system, track technology, etc.

To enhance railway security and build a safety-centric workforce, the RPF conducts specialized training for its personnel across key operational domains. These include counter-insurgency, counter-terrorism, crowd management, IED detection and response, relevant laws and Acts, and handling Left-Wing Extremism, Comprehensive pre-induction training, suburban security duties, and train-escorting practices further strengthen preparedness.
