

**GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS**

**LOK SABHA
UNSTARRED QUESTION NO. 2945
TO BE ANSWERED ON 05.08.2026**

SHORTAGE OF SAFETY STAFF IN RAILWAYS

2945. SHRI SUNIL BOSE:

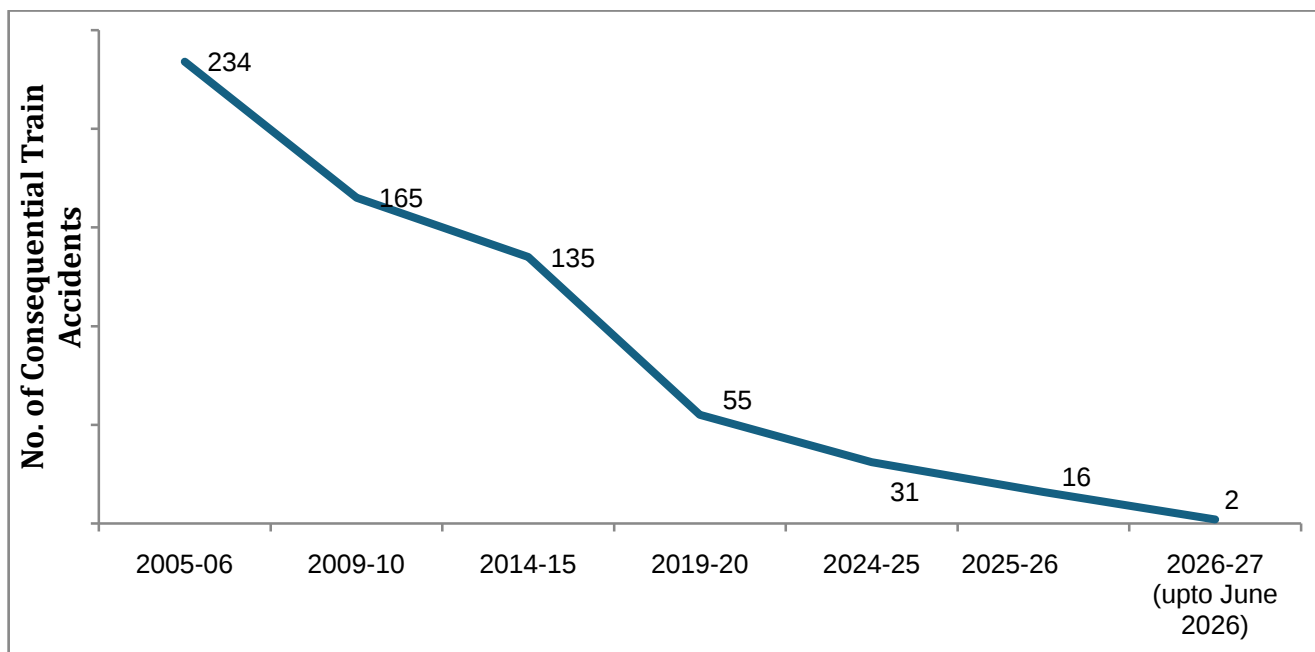
Will the Minister of RAILWAYS be pleased to state:

- (a) the steps taken/being taken by the Government to improve the quality of railway infrastructure in light of the various train collisions reported in the year 2025, Year-wise;**
- (b) whether the Government has identified specific gaps in the existing safety systems and the measures being implemented to address these issues and if so, the details thereof;**
- (c) whether the Government plan to fill the 1.5 lakh vacant posts in the safety category particularly to ensure an adequate number of skilled frontline safety staff employed and if so, the details thereof; and**
- (d) the timeline and strategy for recruiting and training safety staff to enhance the overall 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.



Number of Consequential Train Accidents has reduced as shown in the table below:-

Year	Consequential Accidents
2014-15	135
2025-26	16 (88% lesser)
2026-27 (upto June 2026)	2

Another important index showing improvement in safety in train operations is Consequential Accident Index, the details of which are as under:-

Consequential Accident Index:-

Year	Accident Index
2014-15	0.11
2025-26	0.01 (91% lesser)

This index measures number of consequential accidents as a ratio of total running kilometers of all trains.

$$\text{Accident Index} = \frac{\text{No. of consequential accidents}}{\text{No. of trains X million kilometers run}}$$

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:-**

Year	Expenditure/Budget on Safety related activities (Rs. in Cr.)
2013-14	39,200
2022-23	87,336
2023-24	1,01,662
2024-25	1,14,022
2025-26	1,17,693
2026-27	1,20,389

- 2. Electrical/Electronic Interlocking Systems with centralized operation of points and signals have been provided at 6,671 stations up to 30.06.2026 to reduce accidents due to human failure.**
- 3. Interlocking of Level Crossing (LC) Gates has been provided at 10,395 Level Crossing Gates up to 30.06.2026 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 6,671 stations up to 30.06.2026.**
- 5. 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.**
- 6. System of disconnection and reconnection for S&T equipment as per protocol has been re-emphasized.**
- 7. All locomotives are equipped with Vigilance Control Devices (VCD) to improve alertness of Loco Pilots.**
- 8. 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.

- 9. 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.**
- 10. 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.**
- 11. Mechanisation of track laying activity through use of track machines like PQRS, TRT, T-28 etc. to reduce human errors.**
- 12. Maximizing supply of 130m/260m long rail panels for increasing progress of rail renewal and avoiding welding of joints, thereby improving safety.**
- 13. Ultrasonic Flaw Detection (USFD) testing of rails to detect flaws and timely removal of defective rails.**
- 14. Laying of longer rails, minimizing the use of Alumino Thermic Welding and adoption of better welding technology for rails i.e., Flash Butt Welding.**
- 15. Monitoring of track geometry by OMS (Oscillation Monitoring System) and TRC (Track Recording Cars).**
- 16. Patrolling of railway tracks to look out for weld/rail fractures.**
- 17. The use of Thick Web Switches and Weldable CMS Crossing in turnout renewal works.**
- 18. Inspections at regular intervals are carried out to monitor and educate staff for observance of safe practices.**
- 19. 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.**

- 20. Detailed instructions on issues related with safety of Track, e.g. integrated block, corridor block, worksite safety, monsoon precautions, etc. have been issued.**
- 21. Preventive maintenance of railway assets (Coaches & Wagons) is undertaken to ensure safe train operations.**
- 22. Replacement of conventional ICF design coaches with LHB design coaches is being done.**
- 23. All unmanned level crossings (UMLCs) on Broad Gauge (BG) route have been eliminated by January 2019.**
- 24. 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.**
- 25. 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.**
- 26. 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.**
- 27. Regular counselling and training of staff is undertaken.**
- 28. 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. No.	Item	2004-05 to 2013-14	2014-15 to 2025-26	2014-26 Vs. 2004-14
Technological Improvements				
1.	Use of high-quality rails (60 Kg) (Km)	57,450 Km	1.63 Lakh Km	More than 2.8 times
2.	Longer Rail Panels (260m) (Km)	9,917 Km	87,219 Km	Nearly 9 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 31.03.26: 31,693 Nos.	352 times
5.	Thick Web Switches (Nos.)	Nil	35,971 Nos.	
Better Maintenance Practices				
1.	Primary Rail Renewal (Track Km)	32,260 Km	57,583 Km	1.78 times
2.	USFD (Ultra Sonic Flaw detection) Testing of Welds (Nos.)	79.43 Lakh	2.25 Crore	More than 2.8 times
3.	Weld failures (Nos.)	In 2013-14: 3,699 Nos.	In 2025-26: 272 Nos.	93 % reduction
4.	Rail fractures (Nos.)	In 2013-14: 2,548 Nos.	In 2025-26: 208 Nos.	92% reduction
Better Infrastructure and Rolling Stock				
1.	New Track KM added (Track Km)	14,985 Km	36,429 Km	Almost 2.5 times
2.	Flyovers (RoBs)/Underpasses (RUBs) (Nos.)	4,148 Nos.	14,362 Nos.	More than 3 times
3.	Unmanned Level crossings (Nos.) on BG	As on 31.03.14: 8,948	As on 31.03.26: Nil (All eliminated by 31.01.19)	Removed
4.	Manufacture of LHB Coaches (Nos.)	2,337 Nos.	49,366 Nos.	More than 21 times

Implementation of Kavach:-

- 1. Kavach is an indigenously developed Automatic Train Protection (ATP) system. Kavach is a highly technology intensive system, which requires safety certification of highest order (SIL-4).**
- 2. Kavach aids the Loco Pilot in running of trains within specified speed limits by automatic application of brakes in case Loco Pilot fails to do so and also helps the trains to run safely during inclement weather.**
- 3. The first field trials on the passenger trains were started in February 2016. Based on the experience gained and Independent Safety Assessment of the system by Independent Safety Assessor (ISA), three firms were approved in 2018-19, for supply of Kavach Ver 3.2.**
- 4. Kavach was adopted as National ATP system in July, 2020.**
- 5. Implementation of Kavach System involves following Key Activities:-**
 - a. Installation of Station Kavach at each and every station, block section.**
 - b. Installation of RFID Tags throughout the track length.**
 - c. Installation of telecom Towers throughout the section.**
 - d. Laying of Optical Fibre Cable along the track.**
 - e. Provision of Loco Kavach on each and every Locomotive running on Indian Railways.**
- 6. Based on deployment of Kavach version 3.2 on 1465 Rkm on South Central Railway and experience gained, further improvements were made. Finally, Kavach specification version 4.0 was approved by RDSO on 16.07.2024.**
- 7. Kavach version 4.0 covers all the major features required for the diverse railway network. This is a significant milestone in safety for Indian Railways. Within a short period, IR has developed, tested and started deploying Automatic Train Protection System.**

- 8. Major improvement in Version 4.0 includes increased Location Accuracy, Improved Information of Signal Aspects in bigger yards, Station to Station Kavach interface on OFC and Direct Interface to existing Electronic Interlocking System. With these improvements, Kavach Ver.4.0. is planned for large scale deployment over Indian Railways.**
- 9. After extensive and elaborate trials, Kavach Version 4.0 has been successfully commissioned on 2,633 Route Kilometres as on 31.07.2026, covering the high density Delhi- Mumbai and Delhi-Howrah routes as below:-**

S.No.	Section	Progress (Route Km)
(1)	Delhi-Mumbai route: 1,423 Rkm	
I	Tilak Bridge – Junction cabin – Palwal – Mathura – Kota-Nagda-Ratlam – Vadodra – Virar section	1,327
ii	Vadodara – Ahmedabad section	96
(2)	Delhi – Howrah route: 1,210 Rkm	
i.	Chipyana – Tundla– Kanpur – Subedarganj section	563
ii.	Kanpur – Lucknow section	71
iii.	Mirzapur - DDU (Excluding) section	64
iv.	DDU(FOC) –Bhabua Road section	50
v.	Sasaram – Pheser section	43
vi.	Gaya – Sarmatarn – Nimiaghat section	159
vii.	Chota Ambana - Bardhaman – Howrah section	260

- 10. In addition, track side Kavach implementation work is being taken up on 21,794 RKM covering all GQ,GD,HDN and identified sections of Indian Railways.**

11. The total progress of key items of Kavach on Indian Railway sections are as under:-

S. No.	Item	Progress
i	Laying of Optical Fibre Cable	11,547 Km
ii	Installation of Telecom Towers	1,721 Nos.
iii	Station Data Centre	1,009 station
iv	Installation of Track side equipment	7,726 RKm
v	Provision of Kavach in Loco	6,290 Nos.

12. In addition, work for installation of Kavach in 7,190 Locomotives and 1,200 EMU/MEMU has been taken up.

13. Specialized training programmes on Kavach are being conducted at centralized training institutes of Indian Railways to impart training to all concerned officials. By now more than 94,000 technicians, operators and engineers have been trained on Kavach technology. This includes about 57,000 Loco Pilots & Assistant Loco Pilots. Courses have been designed in collaboration with IRISSET.

14. The cost for provision of Track Side including Station equipment of Kavach is approximately Rs. 50 Lakhs/Km and cost for provision of Kavach equipment on locomotives is approximately Rs. 80 Lakh/Loco.

15. The funds utilized on Kavach works so far up to Jun'26 is Rs.3,875Crores. The allocation of funds during the year 2026-27 is Rs.2,066 Crores. Kavach work is going at good pace in the entire country. Requisite funds are made available as per the progress of works.

Recruitment

Recruitment done in Indian Railways during 2004-05 to 2013-14 vis-à-vis during 2014-15 to 2025-26 is given as under: -

Period	Recruitments
2004-2005 to 2013-2014	4.11 lakh
2014-2015 to 2026-2027 (upto 30.06.2026)	5.56 lakh

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, mechanisations and innovative practices. The vacancies are filled up primarily by placement of indents by Railways with Recruitment agencies as per operational and technological requirements.

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.

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**

Presently, recruitment against 1,61,889 vacancies of non-gazetted personnel has been taken up on Indian Railways as per Annual Calendar 2024, 2025 and 2026.

During January to December 2024, ten Centralized Employment Notifications (CENs) for 92,116 vacancies were notified for filling up of

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 92116 posts have 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
CBT for Level-1 posts (32438 vacancies)	1,08,28,261	152	15
Total Candidates	3,58,59,270		

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

Exam	Candidates	Cities	Languages
2nd Stage CBT for the post of ALP	2,66,363	112	15
2nd Stage CBT for the post of JE/DMS/CMA	1,17,339	118	15
2nd Stage CBT for Non-Technical Popular Categories (Graduate)	1,21,931	129	15
2nd Stage CBT for Non-Technical Popular Categories (Under-Graduate)	51,978	79	15
Total Candidates	5,57,611		

Computer Based Aptitude Test (CBAT) for the posts of ALP and Non-Technical Popular Categories (Graduate) and Computer Based Skill Tests for the posts of Non-Technical Popular Categories (Graduate and Under Graduate) and Ministerial & Isolated Categories have also been completed. Details are as under:

Exam	Candidates	Cities	Languages
CBAT for the post of ALP	1,32,044	84	2
Translation Test for Ministerial and Isolated Categories	1,233	8	2

CBAT for the post of Non-Technical Popular Categories (Graduate)	13,616	38	2
Computer Based Typing Skill Test(CBTST) for the posts of Non-Technical Popular Categories (Graduate)	30,341	58	2
CBTST for the post of Non-Technical Popular Categories(Under Graduate)	13,145	44	2
Total Candidates	1,90,379		

During 2026-2027 (upto 30.06.2026) panels for more than 3,300 candidates for various posts including the posts of Technicians, Junior Engineers, Paramedical Categories, Ministerial & Isolated categories and Assistant Loco Pilots have been finalised. Majority of them are in safety categories.

In addition, as per Annual Calendar for the year 2025, nine Centralized Employment Notifications (CENs) for 51970 vacancies have also been issued. Details are as under:-

CEN No.	Post Name	No. of Vacancies notified	Month of Notification
01/2025	Assistant Loco Pilots	10,970	March-2025
02/2025	Technician	6,238	June-2025
03/2025	Paramedical Categories	434	July-2025
04/2025	Section Controller	368	August-2025
05/2025	Junior Engineers (JEs)/ Depot Material Superintendent (DMS)/ Chemical & Metallurgical Assistant (CMA)	2,585	October-2025

06/2025	Non-Technical Popular Categories (Graduate)	5,810	October-2025
07/2025	Non-Technical Popular Categories (Under-Graduate)	3,058	October-2025
08/2025	Isolated Categories	312	December-2025
09/2025	Level-1 posts	22,195	December-2025
Total		51,970	

First stage/Single stage Computer Based Tests (CBTs) for 29,775 posts have been completed. Details are as under:-

Exam	Candidates	Cities	Languages
CBT for the post of Section Controller (368 vacancies)	4,33,748	131	15
1st Stage CBT for the post of ALP (10970 vacancies)	10,03,719	141	15
1st Stage CBT for the post of JE/DMS/CMA (2585 vacancies)	5,74,351	133	15
CBT for the post of Technician (6238 vacancies)	8,41,525	117	15
CBT for Paramedical Categories (434 vacancies)	3,19,396	106	15
1st Stage CBT for Non-Technical Popular Categories (Graduate) (5810 vacancies)	25,89,851	142	15
1st Stage CBT for Non-Technical Popular Categories (Under Graduate) (3058 vacancies)	32,95,980	142	15

CBT for Isolated categories (312 vacancies)	37,774	34	15
Total Candidates	90,96,344		

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

Exam	Candidates	Cities	Languages
2nd Stage CBT for the post of JE/DMS/CMA	39,034	90	15
2nd Stage CBT for Non-Technical Popular Categories (Graduate)	87,317	98	15
2nd Stage CBT for Assistant Loco Pilots	1,60,014	91	15
Total Candidates	286,365		

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

Exam	Candidates	Cities	Languages
CBAT for the post of Section Controller	2,989	24	2

Further, as per Annual Calendar for the year 2026, three Centralized Employment Notifications (CENs) for 17,803 vacancies have been issued. Details are as under:

CEN No.	Post Name	No. of Vacancies notified	Month of Notification
01/2026	Assistant Loco Pilots	11,127	March-2026
02/2026	Technician	6,557	May-2026
03/2026	Section Controller	119	June-2026

Training

1. Indian Railways have taken several measures to enhance work productivity, motivation and professional competencies of railway employees through structured capacity building and advanced training. Capacity building and skill upgradation are continuous and institutionalized processes supported by a well-established training framework across Indian Railways.

2. Indian Railways have developed a comprehensive training ecosystem in the form of Centralized Training Institutes (CTIs), Multi-disciplinary Zonal Training Institutes (MDZTIs), Multi-disciplinary Divisional Training Institutes (MDDTIs), providing training interventions at various stages of the career of Indian Railway employees to ensure skilling, re-skilling and up-skilling.

3. As safe train operation is the top most priority of Indian Railways, special emphasis is laid on training of safety category employees. Detailed training modules including 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. Training modules are designed to strengthen employees' competencies and equip railway personnel with the skills required for modern, technology-intensive railway operations. These modules are also periodically updated to incorporate new technologies in railway operations and maintenance.

4. Besides these training, some other / special courses are also run by the Training Institutes i.e. Training for Frontline Staff in Soft Skills, Customer Care Training, Disaster Management Training, Accident Investigation Programme for all Supervisors, Investigation for derailment for JE/SSE (P.Way), Train Parting Programme for Drivers, Threat Perception and Emergency Response, Fire Fighting and First Aid Skills, Gender sensitization, Yoga and Meditation and other training etc.
