

A REPORT | SEPTEMBER 2017









We are committed to building sustainable programme models endorsed and adopted by the Government in our states of operation. We focus on collaborating with various departments of the state governments to scale up operations for Social Inclusion, Inclusive Education and Eye Health — our three core areas of work.

Sightsavers works with a broad range of partners — eye hospitals, non-government organisations, the Government, community-based organisations, centres of excellence, and membership-based organisations. We also network with like-minded organisations to enable an exchange of ideas and to advocate for the rights of the disabled.







In the last 51 years, Sightsavers India has enabled thousands of people to lead lives of independence and dignity.

Our work has constantly stood for the rights and needs of people who are visually impaired or blind.

The idea of this report grew out of our experiences of working with truck drivers in 10 locations across India. Since 2014, this one-of- a-kind intervention identifies the eye care needs of truckers and provides corrective eye glasses.

The intervention for truckers is a necessary and welcome addition to enhance road safety in India.

This report is an attempt to document, for the first time in India, the need for eye health care interventions as well as truckers' own views on the vital issue of vision.

We hope this will be an important starting point for the conversation on meeting the needs of this high-risk community and that it will lead to positive action.

9

**Dr SY Quraishi**, Honorary Chairman of the Board of Trustees, Sightsavers (India); Former Chief Election Commissioner of India





Over the last 3 years, we have assessed the vision of thousands of truckers. Drawing on the research-backed insight that good vision accounts for as much as 95% of all sensory requirements to drive safely, our work has helped detect visual problems and provide spectacles or other services/referrals to those who need them.

Road travel accidents account for 1.2 million deaths and upto 50 million injuries worldwide. This intervention is an attempt to pre-empt visual problems among drivers to reduce the enormity of the problem.

Our findings corroborate an earlier study by road safety experts CSIR-CRRI and IDTR\*, which found that drivers operating trucks have undetected eye problems, and that they live and drive for many months with these problems. We hope that this report will flag the need for better and more accessible eye care interventions at the ground level.

RN Mohanty,

CEO

Sightsavers India

\*CSIR: Council for Scientific and Industrial Research CRRI: Central Road Research Institute IDTR: Institute of Driver Training and Research





Since 1966, Sightsavers has supported the treatment of millions of people with eye disorders and brought eye health services to some of the least served areas of the country. In addition, many thousands of people who are irreversibly blind have received rehabilitation and educational support to enable them to lead lives of independence and dignity.

As part of this mandate, truckers and transporters were identified as a special need group.

Eye health services targeted at them started in Mumbai in the year 2014. Over the next year, the scope of this intervention was widened to include truckers in 4 transport hubs: Mumbai, Kolkata, Bengaluru and NOIDA/Ghaziabad in Delhi NCR.

Based on the mobility of the trucking community, a two pronged approach has been adopted. Both approaches provide for eye tests and spectacles to correct refractive errors.

The first approach combines a contact centre with outreach camps and is available in locations where the trucking communities normally congregate. The contact centres are expected to conduct 8 to 12 outreach camps every month. Staffed by an Optometrist, a health worker and a camp organiser, these centres are fully equipped to provide screening facilities.

The second approach uses outreach camps only and is organised in coordination with transport unions, fleet owners, etc.

The data in this report comes from **235 outreach** camps that the organisation conducted in 10 locations. From April to December 2016, these eye camps screened **17,546 people**. The distribution of this number across the country is shown in the map on Page 6.

The data in this report comes from 235 outreach camps that Sightsavers India and its partners conducted over 10 cities in India. In the period April to December 2016, these eye camps screened 17,546 people.

A smaller sample of 324 people were selected for a telephonic survey. Analysis of data from the first set and findings of the telephonic survey constitutes the sources of data in this report.

SOURCE: PROGRAMME MIS, SIGHTSAVERS AND TELEPHONE SURVEY 2016





### Results of the eye checkups:

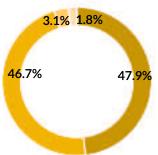
While 47.9% of the participants screened had normal vision, 46.7%, or 8,188 participants, were detected with uncorrected refractive errors. Just 3.1% were detected with other diseases and 1.8% were recommended Cataract, Corneal, Retinal and/or Pterygium checkups or surgeries.

### **Spectacles dispensed:**

Of the **8,188** participants found with uncorrected refractive errors, **7,605** received spectacles free-of cost from the programme. Overall, **94.5%** of the participants received the spectacles.

The analysis revealed that some participants did not find time to collect their spectacles. A minimal number also said they were on leave or had changed jobs and hence had not collected their spectacles.

### DIAGRAM 1A OCCURRENCE OF EYE ISSUES



#### **LEGEND**

- 47.9%: Normal vision
- 46.7%: Uncorrected refractive
- errors
- 3.1%: Other diseases
- 1.8%: Recommended Cataract,
- Corneal, Retinal and/or Pterygium check-ups or surgeries

### Aim of the Report

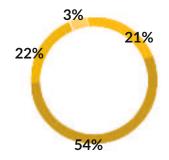
Given this background, the aim of this report is to the present the issue of refractive errors and spectacle usage among truckers and transporters who were part of Sightsavers' interventions.

### **Data Collection and Analysis**

Data collection and analysis followed 2 stages.

- First, camp reports and MIS data for the period 1 April to 31 December 2016 were analysed to understand patterns.
- Telephonic interviews were conducted with select participants who were part of Sightsavers' intervention. The interviews collected data on various related parameters, including age, occupation, nature and type of eye ailment(s), receipt and usage or non-usage of spectacles, and degree of satisfaction from the entire experience.

# DIAGRAM 1B PROFILE OF UNCORRECTED REFRACTIVE ERRORS



#### LEGEND

- 54% Near Correction
- 22% Distance Correction
- 21% Distance and Near Correction
- 3% Others (Cataract etc.)



### **About the Participants in this Report**

The overall composition of the participants in the eye camps is described below.

#### **Gender:**

Of all the participants, **98.1%** were male. This is consistent with the overall predominance of men and boys in the trucking and transportation sector. Only **1.9%** of the participants, were not from the driver or helper categories but were staff members from the fleet companies that helped organise the eye camps. (Participation at the eye camps were open to all).

### Age:

Of the people screened, 60.4% were 19-40 years of age, 37.9% were aged 40-60 years, and 1.8% were aged 60 years or more. The average age of all the people screened was 37.9 years. For the drivers screened, the average age was 38.3 years

To select the 324 people for the telephonic interview, a random sampling method was used.



Thirty six years old Bharat has been a truck driver since the age of 18. He gets a salary of **Rs. 12,000** per month on which his family of four subsists.

For the last few months, Bharat had been finding it difficult to see objects that were far away. This made him uneasy while driving, but a back-to-back driving schedule did not allow him the time he needed to seek eye care services.

The Sightsavers eye camp tested Bharat's eyes and found that he had myopia. The camp also provided him with free-of-cost spectacles to correct his vision.

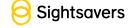
Regaining his full visual faculties has been invaluable for this long-distance truck driver. "I can see everything now, even far away objects," he says. "I feel much more at ease while driving now."

Photo used for representational purpose only.

According to an Indian Institute of Management (IIM) white paper, truck drivers are the most critical players in the road transport sector, forming the human backbone of the industry that contributed 4.9% to India's GDP in 2013.

"The role of a truck driver is challenging, given the unpredictable nature and schedule, long periods and distances away from family members... and the job insecurity involved. Poor design and maintenance of the Indian roads add to problems of health and safety. In spite of this, they are paid poorly... and not surprisingly there is a growing shortage of drivers."

- G. Raghuram, IIM; An Overview of the Trucking Sector in India: Significance and Structure





#### **LOCATIONS OF EYE CAMPS**



### **OCCUPATION**

Of the people screened, 70.7% identified themselves as drivers of trucks, buses or other vehicles, 23.9% were members of staff and 5.4% were conductors or helpers.

## ABOUT THE PARTICIPANTS IN THE TELEPHONICINTERVIEWS

A total of 324 respondents – 268 drivers and 56 staff from 10 cities were interviewed for this report. The average age of the drivers interviewed was found to be 44.6 years.

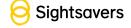
Among the 268 drivers, 81% were truck drivers, 11.6% were bus drivers, and 7.5% drove other vehicles such as autos, private vehicles or tempos.

A majority of the respondents were either uneducated or did not have formal educational qualifications, which may explain the low levels of awareness about the relationship between good vision and road safety, including an understanding of basic eye care and the use of spectacles.

### EYE HEALTH SERVICES PROVIDED BY SIGHTSAVERS

The report is grounded in Sightsavers' work in providing eye health services. These services include:

- Eye tests, including screening visual acuity, colour vision, contrast sensitivity, glare recovery, vertical field of vision and peripheral vision.
- Counselling on the issues identified
- Treatment advice
- Provision of free-of-cost spectacles





The study findings flag several trends and insights that describe the prevalence of eye health issues among drivers, helpers and other staff. In addition, the relevance of eye camps in addressing this need has also come up in a major way.

### A very high number of respondents were experiencing eye-related problems:

An overwhelming majority—93.2% of the respondents — said they felt the need to attend the eye camp because of an eye-related problem.

Of these, as many as 42.2% said they faced an issue in driving or working. This includes problems such as:

- Reading the screens of mobile phones,
- · Reading addresses while driving,
- For drivers with the need for bifocals, problems in judging height and distance.

Of the **137** respondents who said they had a problem with their eyes, a majority (**70.1%**) report itching, followed by problems such as watery eyes (**64.2%**), difficulty in seeing distant objects (**62.8%**), and headaches (**60.6%**). The other major issues reported were difficulty in reading (**37.2%**) and redness in the eyes (**19.7%**).

# Respondents have been living with eye problems for as long as 9 months:

On being asked why they had not sought eye care before, most cited lack of time. Most do not have access to eye care services that are free, fast and available near them. Very heavy workloads also do not permit the respondents to seek assistance or advice, with most preferring to just carry on as best as they can.

- The report findings highlight six major insights about the occurrence of refractive error, access to eye health, and the ability to reach out or seek eye health.
- Most don't have access to eye care services that are free, fast, and available near them.
- In some cases, spectacles provided freeof cost have not been used due to factors such as discomfort in using eye glasses.
- Overall, the response to the eye health care camps were positive.

THE FINDINGS ARE A SUMMARY OF THE ANALYSIS FROM PROGRAMME MIS REPORTS AND TELEPHONE INTERVIEWS CONDUCTED





# Medical interventions are not sought for eye-related problems:

A majority, **64.2**% of the respondents, said they were not doing anything about their eye problems. Coping mechanisms used to manage driving and other responsibilities include asking people around for help. A little more than a third, **31.5**%, reported using some form of home remedy, but on probing, this turned out to be nothing more than washing of eyes with clean water. Just **4.32**% reported seeking eye care services from medical facilities. Every one of the 324 respondents, each one required professional eye care: 96.6% were given spectacles, and 3.4% were referred for further treatment.

### Those referred to hospitals may not have been able to follow up:

The in-depth telephonic interviews showed that many of the 3.4% referred to hospitals were not able to go:

- Mahadev, a driver from Kadamboli, Mumbai said that the hospital authorities asked him to bring an attendant, which he could not do and so he could not get the treatment he needed.
- Govind Lal, another driver from Mumbai, said he was referred to a hospital in Dharavi but did not know how to reach the area.

# Respondents who received spectacles did not always use them:

Only 17.9% of the drivers and 2.9% of the staff said they always used the spectacles they received from Sightsavers. As many as 31.9% of the drivers said they never used the spectacles they received.

Of the 250 people who received spectacles, many reported problems in using their spectacles, for a variety of reasons, including headaches and discomfort. A small number, 13.6%, said they were simply not in the habit of wearing spectacles, while 1.2% reported their spectacles as either lost or broken.

However, those who used spectacles reported a marked improvement in vision. Of the total respondents, 79% said their vision improved greatly or to a large extent with the spectacles they were given. Only 3.7% said their vision had improved "to a little extent".

#### **EYE-RELATED PROBLEMS REPORTED**

**60.6%** Headaches

**10.2%** Tiredness in the eyes

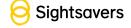
**70.1%** Itching

**64.2%** Watery eyes

**19.7%** Redness of the eyes

**37.2%** Difficulty in reading

**62.8%** Distance vision problems

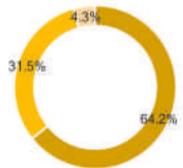




# Overwhelming numbers suggest and support organising eye camps:

As beneficiaries, 80% of the respondents suggested that eye camps be organised in the future as well. A majority, 70%, said they were greatly satisfied with the eye camps and 16.4% said they were satisfied to a large extent. A smaller number, 12.7%, said they were not so satisfied, mostly because of factors such as delay in receipt of spectacles and discomfort in using them.

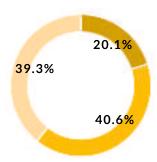




#### **LEGEND**

- 64.2%: Not doing anything about eye problem(s)
- 31.5%: Tried home-based remedies
- 4.3%: Sought medical care

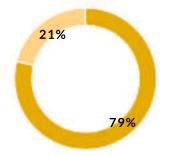
### DIAGRAM 3 SPECTACLES USE



#### **LEGEND**

- 20.1%: Always use spectacles
- 40.6%: Sometimes use spectacles
- 39.3%: Never use spectacles

### DIAGRAM 4 VISION IMPROVEMENT



#### **LEGEND**

- 79%: Vision improved greatly or to a large extent
- 21%: Vision improved to a little extent



Although the intervention covers a small sample of India's **9 million** strong trucking community, Sightsavers India's experience and analysis show that the points below can be generalised to the whole group.

- Eye conditions such as refractive errors are common among truckers and transporters.
   Across 10 locations, this came up consistently as an unmet need.
- However, awareness on the need to access eye care as well as the potentially serious implications of this problem is very low, both among the truckers themselves and among the fleet companies that hire them.
- This is evidenced by the almost total absence of essential or standard good practices such as compulsory, periodic eye checkups and/or provision of assistance or referral services around eye care.
  - Refractive errors are uncommonly high among truck drivers in India. Awareness about eye care and the need to access it is low.
  - Eye healthcare interventions that are easy to access for the trucker community are not easily available.
  - Response to outreach work that brings eye health care to the truckers is very positive.

Consequently, there are little or no eye care interventions at the ground level that are easy to access for this community.

- Both truckers and fleet companies were extremely receptive to the on-ground interventions, i.e. the eye camps. The tested population reported an immediate and remarkable improvements in vision.
- From this experience, Sightsavers India can confidently state that outreach-based eye health care services, including testing, provision of spectacles, and referrals for the trucking community have a huge potential for scaling up in India. There is a felt need for customised, rapid, and convenient services specific to the needs of drivers.

SIGHTSAVERS PROGRAMMATIC EXPERIENCE AND ANALYSIS OF DATA COLLECTED CAN BE CONSIDERED REPRESENTATIVE OF THE SITUATION FOR ALL TRUCKERS IN INDIA.



- To support the success of such programmes, it is essential that investments be made in awareness generation, specifically designed and targeted towards the trucking community. A special effort could be made to encourage this community to seek no/low-cost eye care services from existing Government/non-Government facilities in the country.
- Additionally, the report also notes tremendous scope for patient education on topics related to eye health, including eye glass usage.
- Although beyond the scope of this report, further studies may explore the correlation between the low awareness levels and low agency to access eye care with the education levels as well as income levels across truckers, cleaners, helpers and drivers.

"The Decade of Action for Road Safety can help all countries drive along the path to a more secure future... Today, partners around the world are releasing national or citywide plans for the Decade, hosting policy discussions and enabling people affected by road crashes to share their stories widely. Now we need to move this campaign into high gear and steer our world to safer roads ahead. Together, we can save millions of lives."

- From the Former UN Secretary-General Ban Ki-moon's message on the launch of the Decade of Action for Road Safety, 11 May 2011.



Sixty six years old Chandrika Ram has been driving dumper trucks for the last 40 years. He ferries fish from the Odisha's Paradip port.

He makes **Rs.8,000** per month, on which his family of 9 members subsists. He had been steadily losing vision in one eye when he attended the Sightsavers eye camp.

At the eye camp, Chandrika Ram was diagnosed with cataract and referred to a Sightsavers partner hospital. A free-of-cost surgery later, Chandrika Ram can now see clearly with both eyes, a boon for this below-poverty-line driver on whom an entire family depends for survival.

Photo used for representational purpose only.

### **CREDITS**

### A REPORT BY SIGHTSAVERS INDIA | BASED ON

Assessment of Refractive Error and Spectacle Usage among Truck Drivers in India: Drivers & Cleaners Satisfaction towards Eye Care Interventions | A study conducted by Sightsavers India with support from RPG Foundation and CEAT

### Monitoring, Evaluation, Research & Learning Unit

Abraham George, Director | Monu Ravindran, Programme Manager | Soumya Mohanty, Research Officer

### **Data Collection, Entry and Report Writing**

Rajeev Tiwari, Consultant

### **Communications and Fundraising Unit**

Avijit Dey, Director, Fundraising and Communications | Rishibha Gupta, Manager-Brand and Communications | Ritika Rastogi, Associate-Graphic Designer

#### **Review and Technical Advice**

Dr. Sandeep Buttan, Advisor Prasannakumar PN , Director-Programme Operations

### **Editor and Designer**

Athena Initiatives LLP, New Delhi

#### **Cover Photo**

Shutterstock

### www.sightsaversindia.in





Follow @SightsaversIN



Watch SightsaversIN

### **Registered office**

A-3, Shivdham, New Link Road, Kanchpada, Malad (west) Mumbai - 400 064

Phone: +91 22 28820808/1919

### **Country office**

45, Okhla Industrial Estate, Phase III New Delhi - 110 020 Phone: +91 11 65955511/33

### Other offices

No. 92/1, Mosque Road, Frazer Town, Bangalore - 560005

GC 104, Sector III, Salt Lake Kolkata - 700 106 Phone: +91 33 40086225

E-1/136, Arera Colony Bhopal - 462016

Phone: +91 755 4292807

