

TRAFFIC CRASH INJURIES AND DISABILITIES: THE BURDEN ON INDIAN SOCIETY



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This state fact sheet highlights the impact of road crashes on people belonging to different social categories in the state. The fact sheet uses data from the 2021 study titled "Traffic Crash Injuries and Disabilities: The Burden on Indian Society". The fact sheet depicts data on the average costs of road crashes, insurance compensation, disability status, and so on.

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Uttar is a northern state in India, which is the most populated state in the country. With 18 divisions and 75 districts, the state has a 2020 projected population of 23.78 crores, with a nominal Gross State Domestic Product (GSDP) in 2019-20 of INR 15,79,807 crores³. The nominal per capita GSDP of Uttar Pradesh was INR 57,480 in 2016-17. The urbanisation rate in Uttar Pradesh is low, and most of the state's population resides in rural areas. As of 2011, only 22.28% of Uttar Pradesh's population resides in urban areas⁷.

Uttar Pradesh recorded 2,62,65,000¹ registered vehicles as of March, 2017. The state also witnessed 37,537 road crashes and 23,285² road crash deaths in 2019 alone, making it the state with the highest road crash deaths in 2019.

Based on several factors like proportion of urban population, literacy rate, poverty rate and per capita net state GDP, Uttar Pradesh has been categorised as a "Low Capacity State" in this study. Uttar Pradesh also has a relatively low female literacy rate. The female literacy rate in the state was 59.26%, while male literacy rate was 79.24%⁶. In terms of State performance on meeting the SDG goals, Uttar Pradesh scores 55 on the index. This indicates that Uttar Pradesh has met 55% of the SDG targets for 2030⁴. Additionally, the State scores 40 on the poverty related SDG.



Population 23.78 Crores



2017 2,62,65,000 Registered vehicles



2019
37,537
road
crashes



2019
23,285²
road crash
deaths

Highest
road crash
deaths in
2019



2011
59.26%
female
literacy
rate

An icon of a female figure holding a pencil, with a red arrow pointing to the right.

2011
79.24%⁶
male
literacy
rate

An icon of a male figure holding a pencil, with a red arrow pointing to the right.

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2. National Crime Records Bureau, "Accidental Deaths and Suicides in India", National Crime Records Bureau Website, August 28, 2020, Accessed on October 9, 2020, https://ncrb.gov.in/sites/default/files/ADSI_2019_FULL%20REPORT_updated.pdf
3. PRS India, "Uttar Pradesh Budget Analysis 2019-20", PRS India website, February, 2019, Accessed on October 9, 2020, https://www.prsindia.org/sites/default/files/budget_files/State%20Budget%20Analysis%20-%20UP%202019-20%20final.pdf
4. NITI Aayog, "SDG India Index & Dashboard, 2019-20", NITI Aayog Website, December 20, 2019, Accessed on October 9, 2020, https://niti.gov.in/sites/default/files/SDG-India-Index-2.0_27-Dec.pdf
5. Unique Identification Authority of India, "State/ UT wise AADHAR Saturation Data", UIDAI website, May 31, 2020, Accessed on October 9, 2020, <https://uidai.gov.in/images/state-wise-aadhaar-saturation.pdf>
6. Government of Uttar Pradesh, "Statistics of Uttar Pradesh", Government of Uttar Pradesh Website, Accessed on October 9, 2020, <http://up.gov.in/upstateglance.aspx>
7. Town and Country Planning Department, Uttar Pradesh, "Urbanization in Uttar Pradesh", Town and Country Planning Department website, Accessed on October 9, 2020, <http://uptownplanning.gov.in/page/en/urbanization-in-uttar-pradesh>

PROFILE OF THE SAMPLE IN UTTAR PRADESH:

- A total of 514 respondents (victims and household members) participated in the survey for the PSIA study. Among them, 101 respondents (19.6%) belonged to High Income Households (HIH), and 413 respondents (80.4%) belonged to Low Income Households (LIH). The average monthly household income for HIH was approximately INR 2.33 lakhs, and for LIH, the income was INR 15,224. In addition, 106 truck drivers with an average income of INR 15,991 were included in the survey. 91.6% of the respondents were male road crash victims, and 8.4% were female road crash victims. As many as 161 (31.3%) of the victims were chief wage earners. 39.3% of the victims live(d) in urban areas.
- 226 of the households had a family member that died as a result of the road crash (44%). About 21.4% of these victims died at the crash scene. In addition, 76 victims suffered from some disability (14.8%). Out of these, 44 victims (57.9%) developed a long term disability.
- The average estimated Out of Pocket Expenses borne by victims/ household members across households was INR 78,584. Only about 48% of the respondents received some form of compensation.

TABLE 1: RESPONDENT PROFILE

| Particulars | Uttar Pradesh |
|--|---------------|
| Participants (#, %) in HIH | 101 (19.6) |
| Average monthly household income for HIH (INR) | 2,32,673 |
| Participants (#, %) in LIH | 413 (25.1) |
| Average monthly household income for LIH (INR) | 15,224 |
| Participants (#) as truck drivers | 106 |
| Average monthly income from driving profession for truck drivers (INR) | 15,991 |
| % of female victims | 8.4 |
| #, % crash deaths | (226) 44.0 |
| #, % with major crash injury | (288) 56.0 |
| #, % recovered with some disability | (76) 26.4* |
| #, % have long term mobility disability | (44) 57.9 |
| % of victims who were chief wage earner | 161 (31.3) |

*taken as a percentage figure of total major injuries.

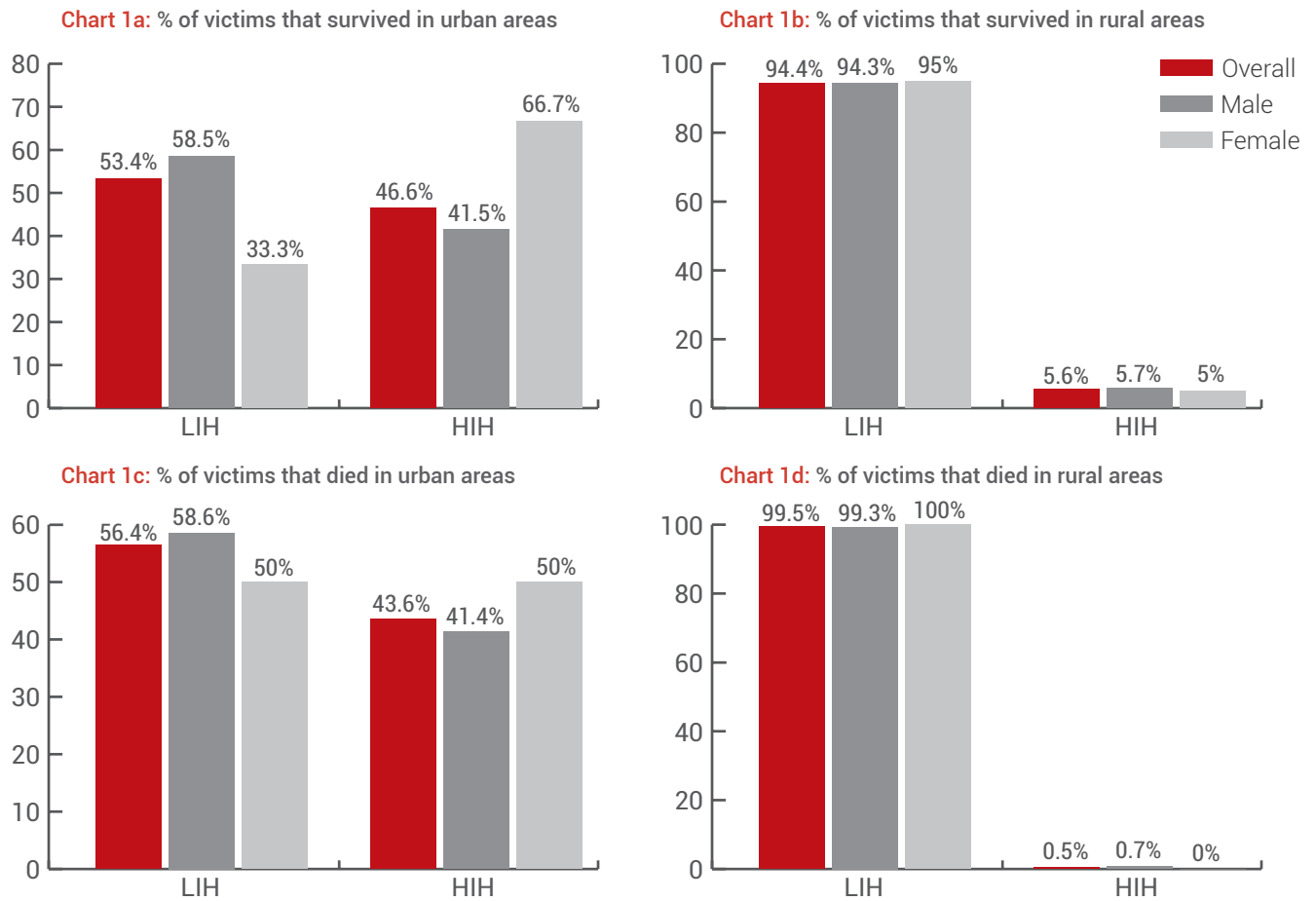
PROFILE OF VICTIMS BASED ON THE OUTCOME OF THE CRASH:

- Based on the outcome of the crash, most of the victims that died belonged to low income households. For urban areas, 56.4% of the victims that died belonged to LIH and in rural areas, 99.5% of the victims that died belonged to LIH.
- Further, it can be observed that for both LIH and HIH, an equal proportion of female victims died in urban areas. Whereas, for males, the proportion of victims

that died was higher for LIH in both urban and rural areas, with LIH comprising 58.6% of the male victims in urban areas, and 99.3% of the male victims in rural areas. 100% of the female victims that died in rural areas belonged to LIH.

- Proportion of male victims that survived in both urban and rural areas was higher for LIH than for HIH. The proportion of female victims that survived was higher for LIH than HIH in rural areas. However, for urban areas, the proportion of female victims that survived was higher for HIH than LIH.

CHART 1: HABITATION- WISE TRENDS OF ROAD CRASH OUTCOMES

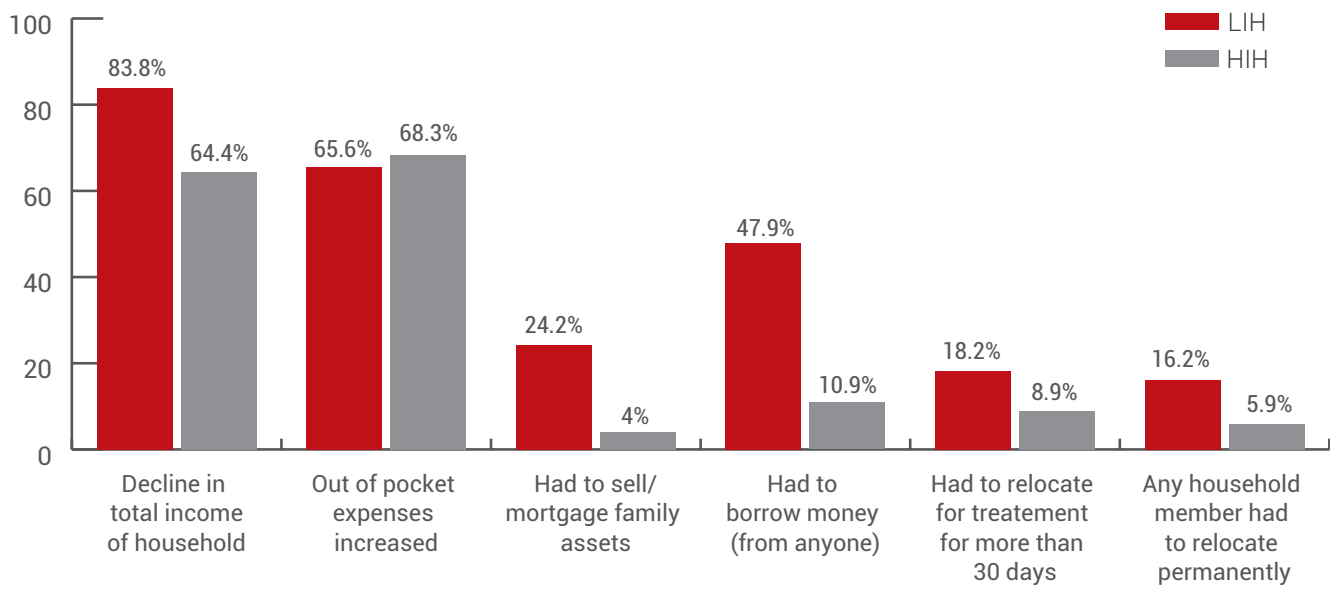


FINANCIAL IMPACT OF ROAD CRASHES IN UTTAR PRADESH:

83.8% of LIH admitted that there was a decline in total income of the household due to the road crash, while 64.4%

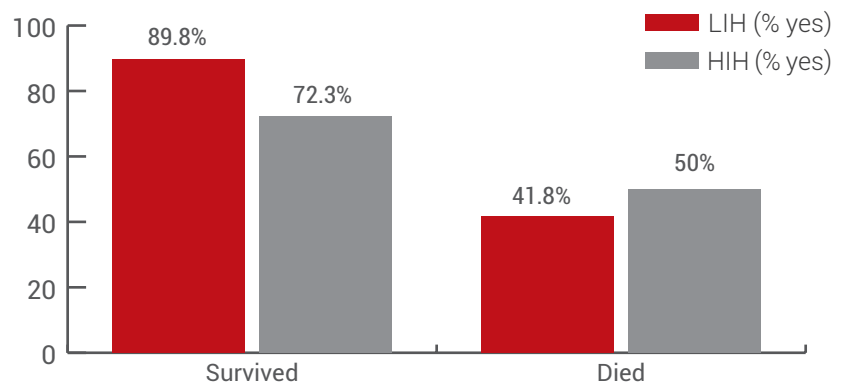
of HIH admitted to the same. Further, a larger number of cases of property sale, money borrowing, and relocation were observed in LIH than in HIH. Interestingly, a larger proportion of HIH reported OOPE than LIH. This can be due to the fact that HIH can afford better quality treatment than LIH.

CHART 2: FINANCIAL IMPACT ON THE VICTIM HOUSEHOLD



Out of pocket expenditure (OOPE) is the payment made directly by individuals at the point of service where the entire cost of the health good or service is not covered under any financial protection scheme. The OOPE for LIH was about 5.8% higher for LIH than for HIH. Total OOPE in Uttar Pradesh was INR 79,433 for LIH, and INR 75,110 for HIH. 89.8% of the LIH where the victim survived admitted to paying OOPE, while 72.3% of the of the HIH where victims had survived admitted to paying OOPE.

CHART 3: % OF VICTIMS/FAMILIES THAT FACED OOPE

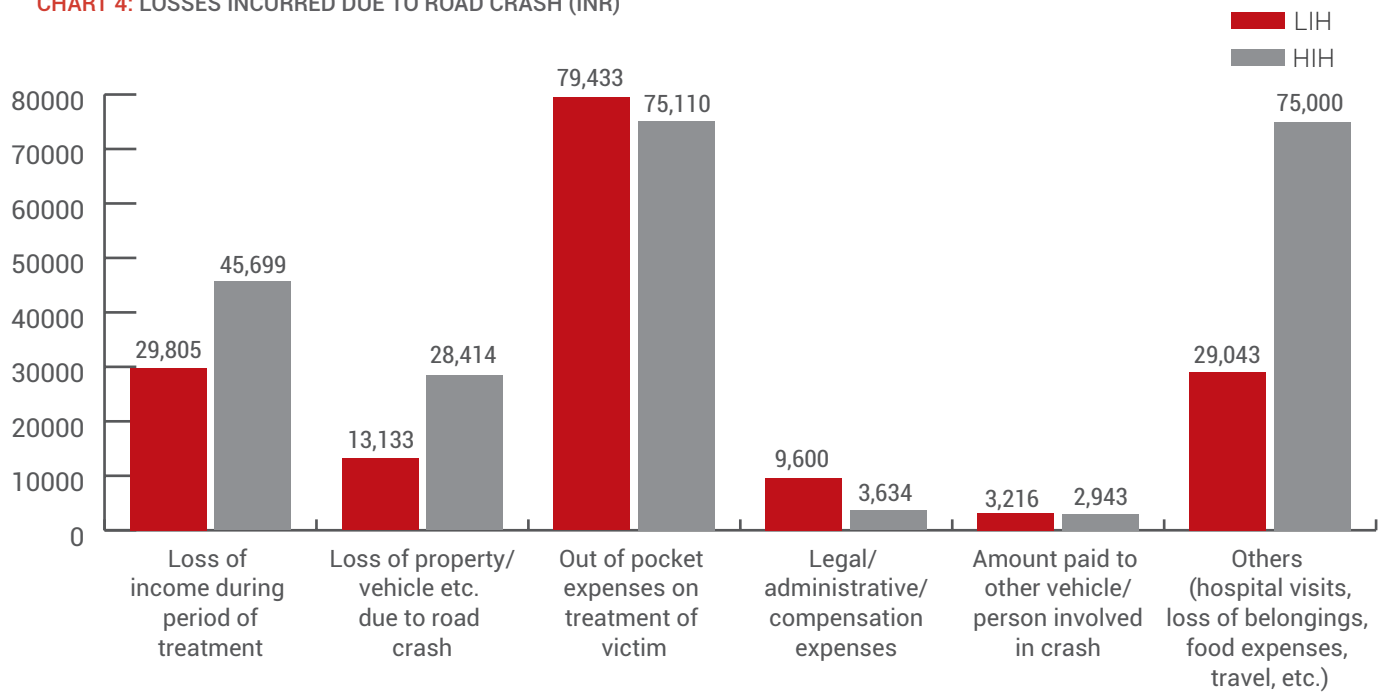


LOSSES INCURRED DUE TO ROAD CRASHES:

The total losses faced by 413 low income households and 101 high income households was INR 1,64,230, and INR

2,30,800 respectively. As HIH have significantly higher income than LIH, the loss of income was higher for HIH than for LIH. Loss of property and legal expenses accounted for about 8% and 5.8% of LIH losses respectively, and 12.3% and 1.6% of HIH losses respectively. The breakup of the losses is as follows:

CHART 4: LOSSES INCURRED DUE TO ROAD CRASH (INR)

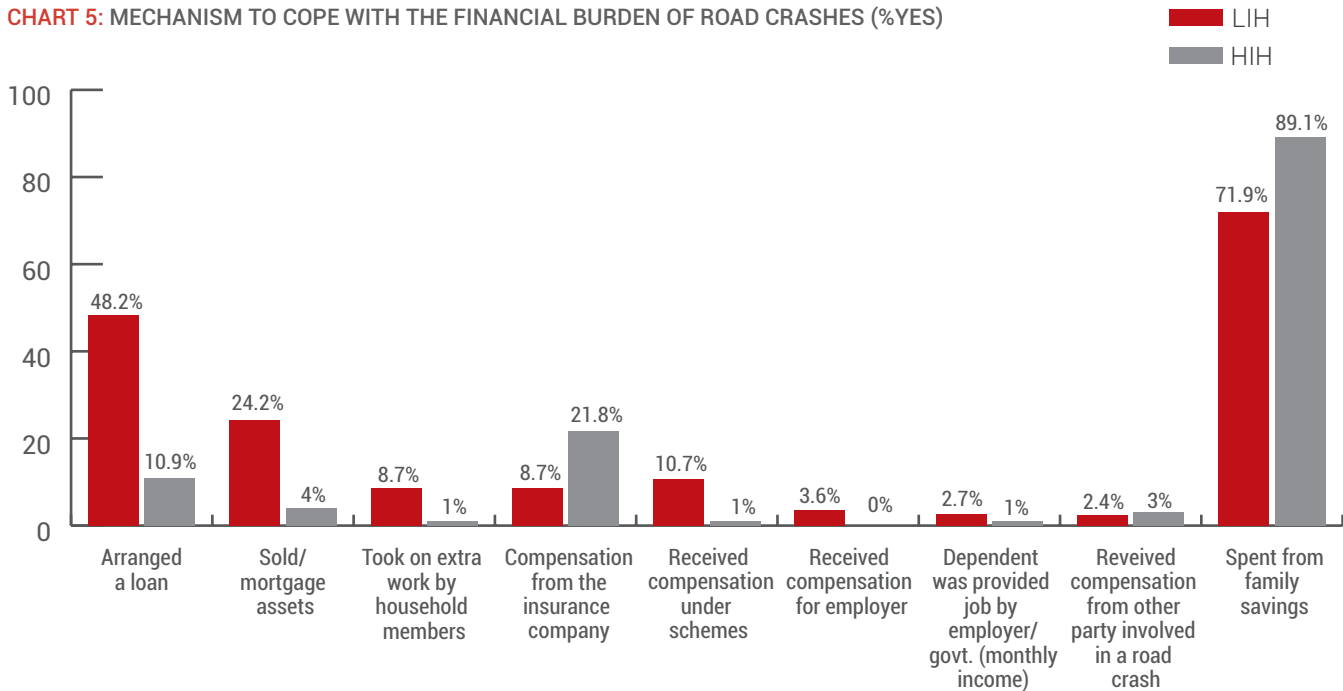


MECHANISM TO COPE WITH FINANCIAL LOSSES:

About 48.2% of LIH had to arrange for a loan as opposed to 10.9% of HIH. Further, a larger proportion of LIH had to resort to selling assets, and taking on extra work than HIH.

Interestingly, a larger proportion of HIH (89.1%) spent from family savings to cope with the losses than LIH (71.9%). This can be attributed to the fact that savings will be larger for HIH than for LIH.

CHART 5: MECHANISM TO COPE WITH THE FINANCIAL BURDEN OF ROAD CRASHES (%YES)



COMPENSATION AVAILED AND RECEIVED UNDER MOTOR VEHICLE, MEDICAL, AND LIFE INSURANCE SCHEMES:

- As low as 7.5% of LIH victims, and 30.7% HIH victims/family members availed motor vehicle insurance compensation. Among those that availed compensation, just 41.9% of the LIH victims, and 38.7% of HIH victims received the eligible compensation. In terms of time taken, LIH victims received their compensation in about 11.1 months while HIH victims received it in about 10.3 months.
- Only 1.7% of LIH victims and 9.9% HIH victims/family members availed medical insurance compensation. Among those that availed compensation, 42.9% of the LIH victims, and 90% of HIH victims received the eligible compensation. In terms of time taken, LIH victims received their compensation in about 3.7 months while HIH victims received it in about 4 months.
- 5.8% of LIH, and 10.9% HIH victims/family members availed life insurance compensation. Among those that availed compensation, 91.7% of the LIH, and 72.7% HIH received the eligible compensation. In terms of time taken, LIH victims received their compensation in about 4.1 months, and HIH in 5.9 months.



CHART 6: VICTIMS THAT AVAILED AND RECEIVED COMPENSATION FROM INSURANCE (% YES)

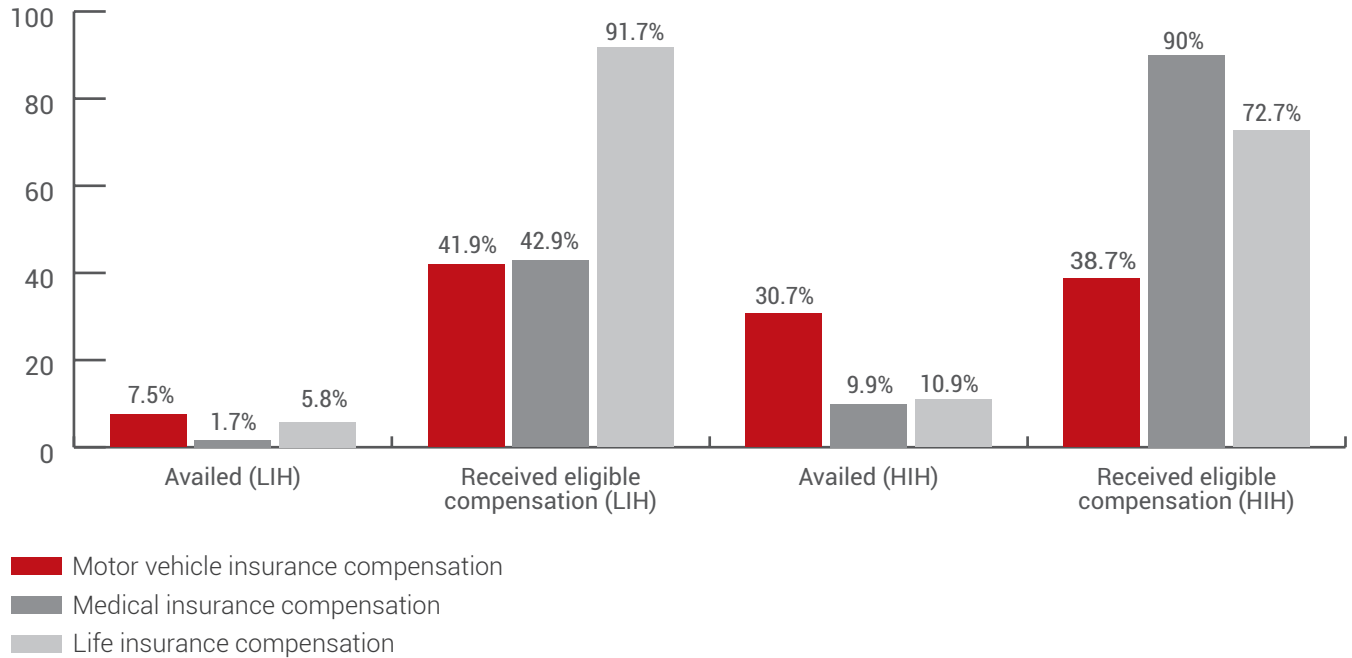
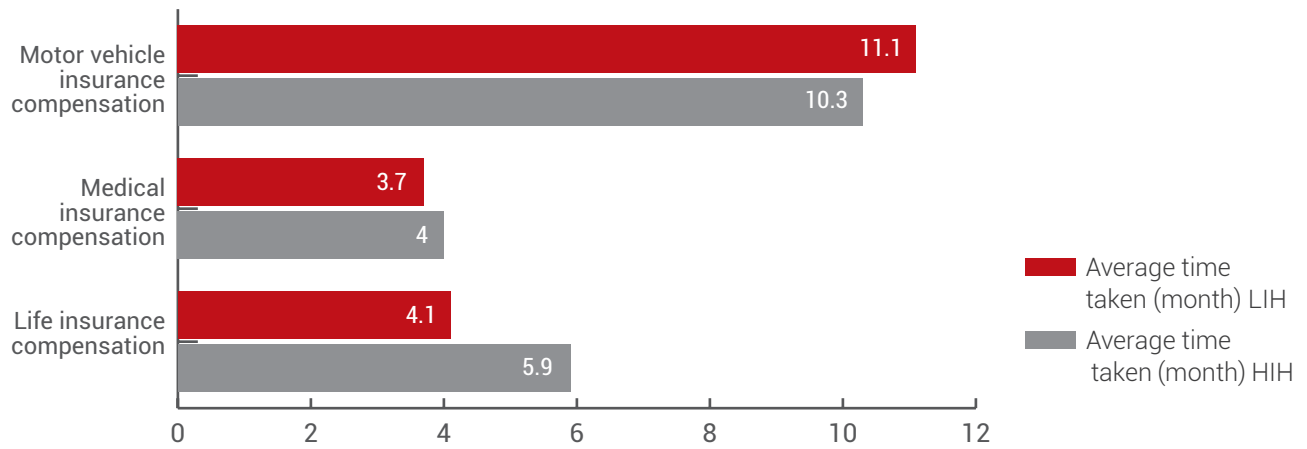


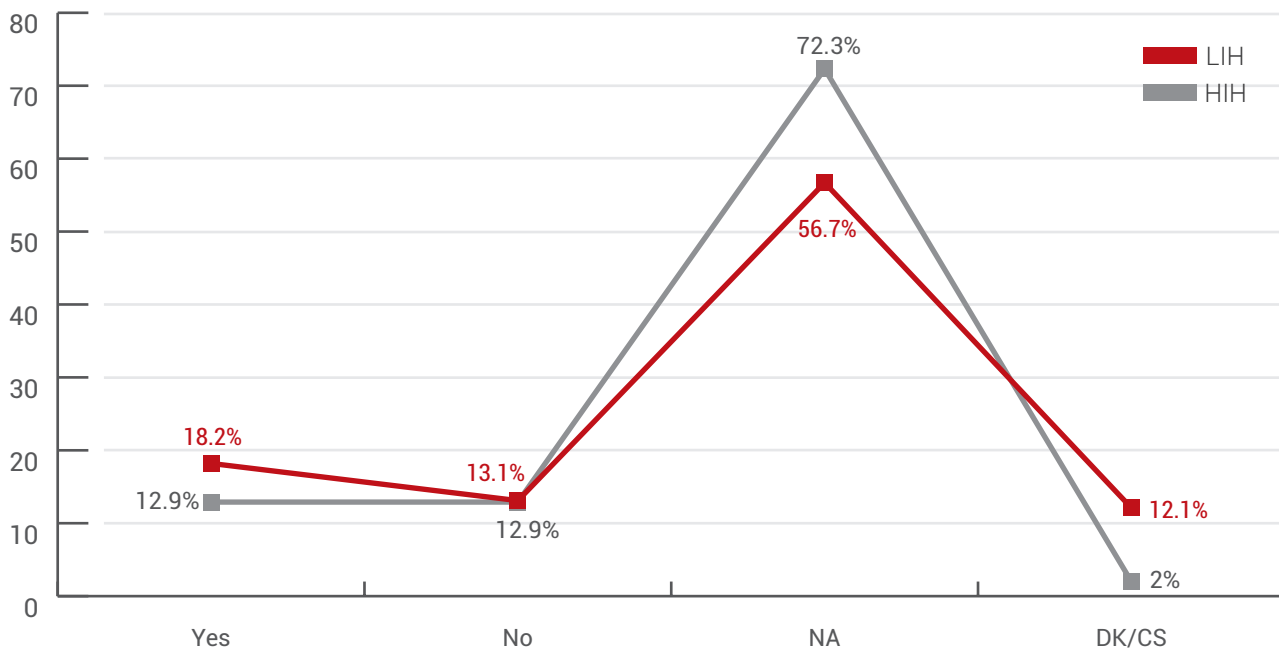
CHART 7: AVERAGE TIME TAKEN (MONTHS) TO RECEIVE COMPENSATION



DIFFICULTY IN AVAILING COMPENSATION:

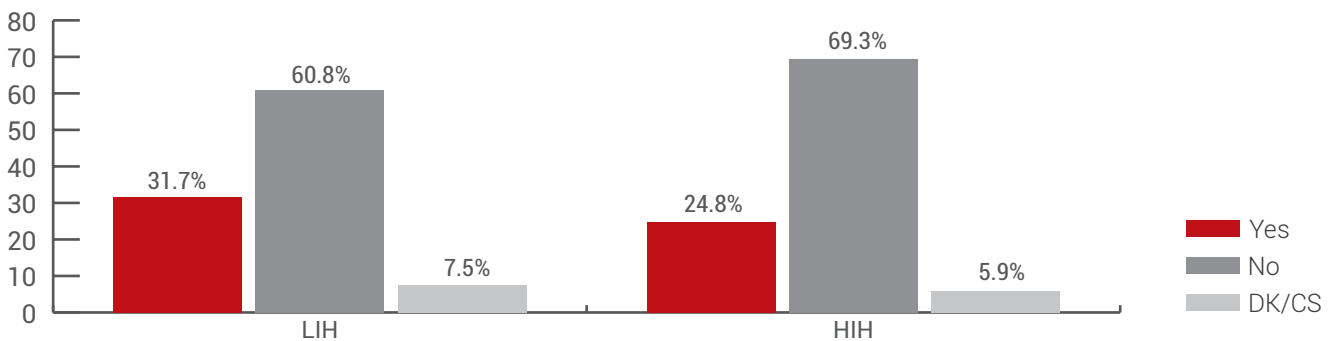
When asked about the difficulty in availing compensation, a larger proportion of LIH (18.2%) affirmatively responded than HIH (12.9%).

CHART 8: RESPONSES WHETHER VICTIM/ HOUSEHOLD MEMBER FACED ANY DIFFICULTY WHILE AVAILING COMPENSATION (%)



A larger percentage of LIH (31.7%) also admitted to filing a case in the Motor Accidents Claims Tribunal (MACT), than HIH (24.8%).

CHART 9: RESPONSES WHETHER VICTIM/ FAMILY FILED A CASE IN MACT (%)

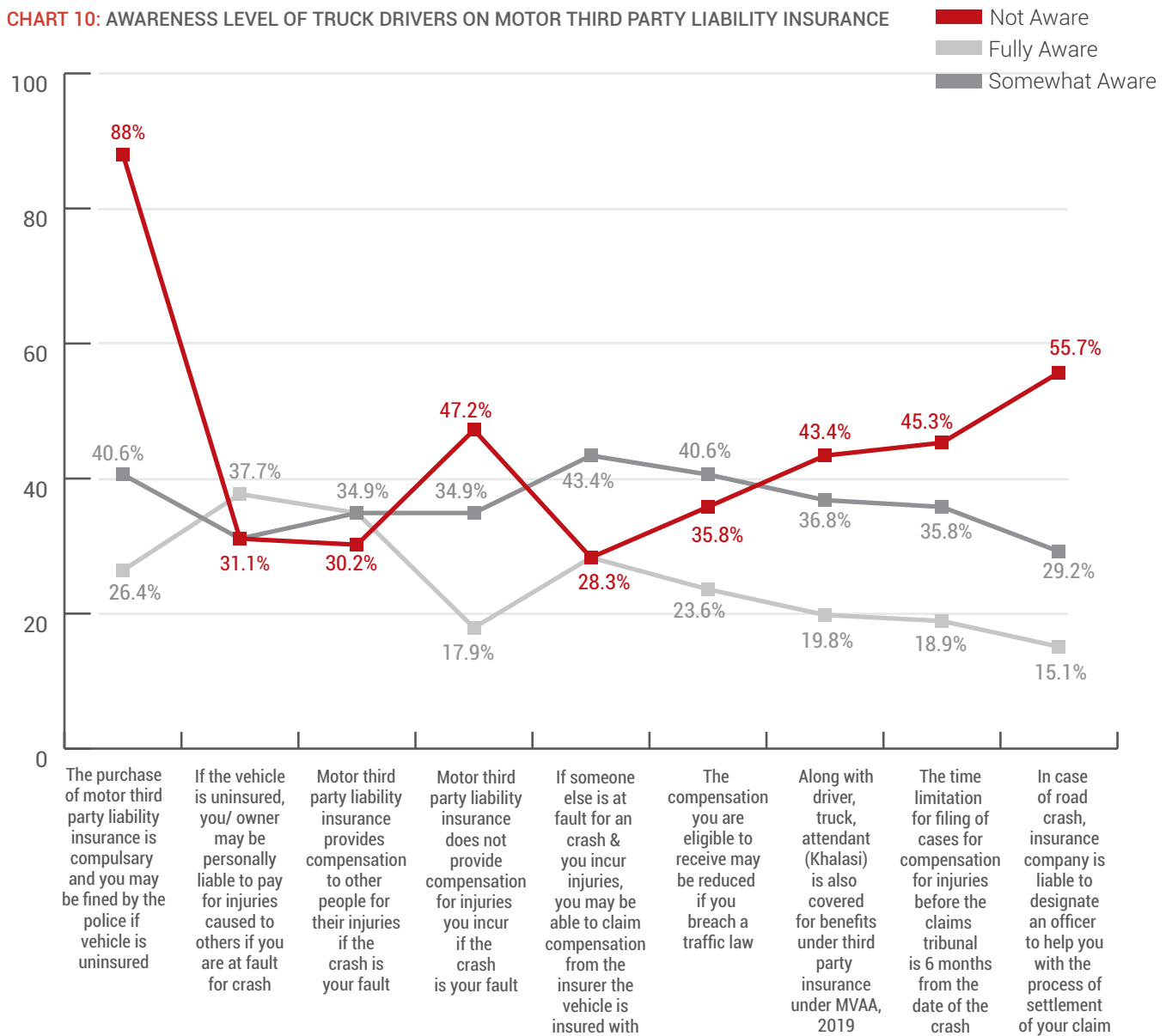


TRUCK DRIVER'S AWARENESS LEVELS ON MOTOR THIRD PARTY LIABILITY INSURANCE:

Among the 106 truck drivers surveyed in Uttar Pradesh, 43.4% of the truck drivers were unaware that the attendant or khalasi is also covered under the motor third party liability insurance under the Motor Vehicles (Amendment) Act,

2019. As high as 45.3% of the truck drivers were unaware about the time limit for filing cases for compensation, which is 6 months from the crash occurrence. Further, as high as 55.7% of the drivers were unaware about the insurance company's liability to designate an officer to assist claimants in the claim settlement process. 33% of the respondents were unaware that Motor Third Party Liability Insurance is mandatory, and that the Police can charge fines for uninsured vehicles.

CHART 10: AWARENESS LEVEL OF TRUCK DRIVERS ON MOTOR THIRD PARTY LIABILITY INSURANCE

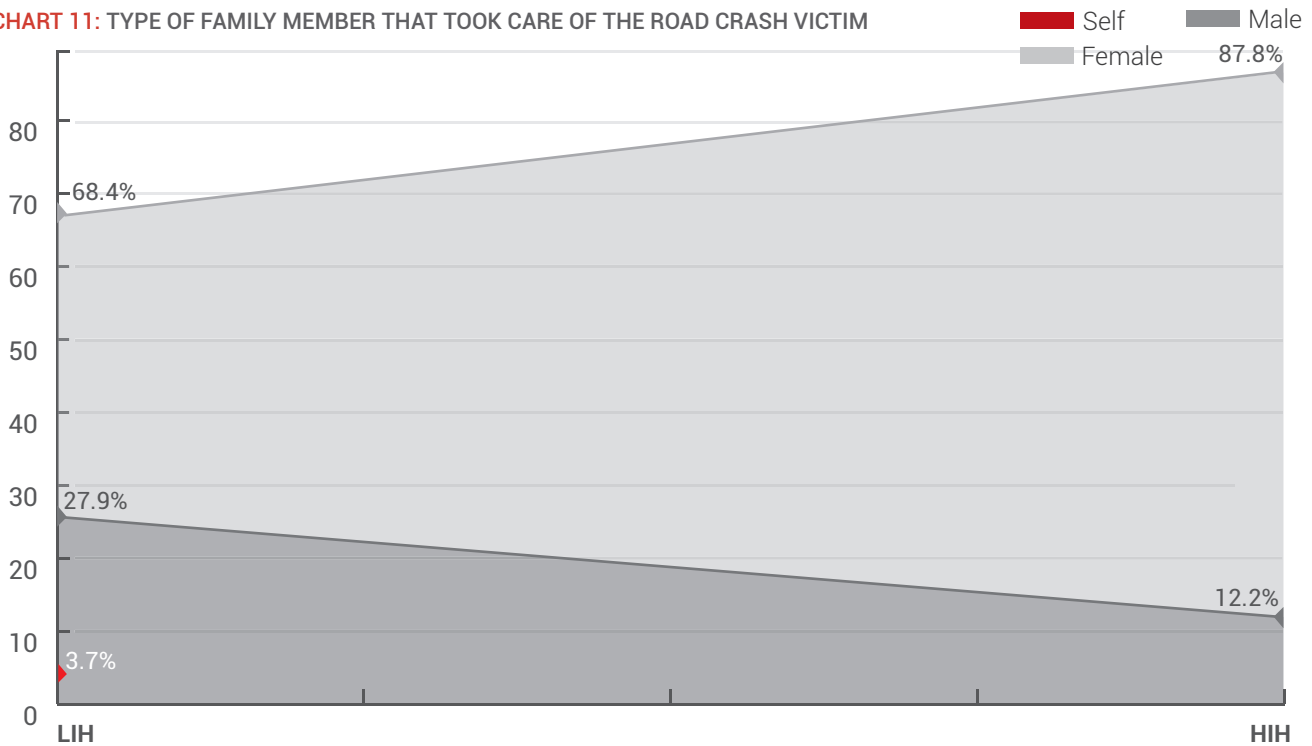


TYPE OF CAREGIVER FOR VICTIM:

In the case of both LIH and HIH, the majority of the victims had a female family member as their caregiver (68.4% for

LIH and 87.8% for HIH). Interestingly, there was a greater proportion of male caregivers from LIH (27.9%) than HIH victims (12.2%). 3.7% of the victims took care of themselves in LIH, as opposed to 0% of the victims in HIH.

CHART 11: TYPE OF FAMILY MEMBER THAT TOOK CARE OF THE ROAD CRASH VICTIM



HEALTH IMPACT ON HOUSEHOLD MEMBERS WITH VICTIMS:

As high as 55.2% of the victims from LIH admitted that their family/ household members developed health problems post crash, and 6.5% of the HIH victim household members developed health problems post crash.

CHART 12: RESPONSES ON WHETHER HEALTH PROBLEMS DEVELOPED IN HOUSEHOLD MEMBERS

Chart 12a:
Household members of the victim developed health problems: LIH

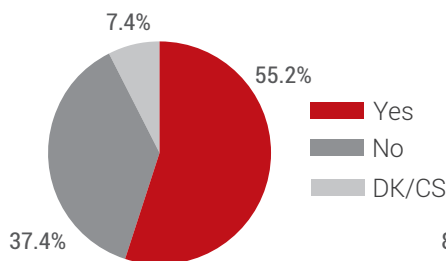
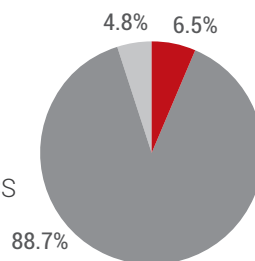


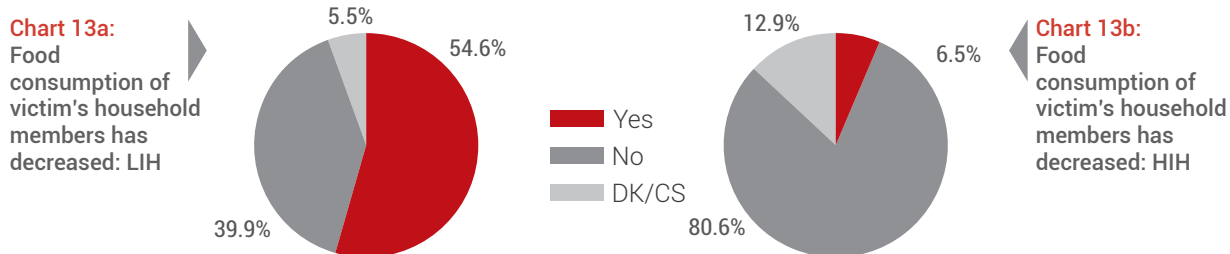
Chart 12b:
Household members of the victim developed health problems: HIH



FOOD CONSUMPTION STATUS OF HOUSEHOLD MEMBERS OF THE VICTIM:

As high as 54.6% of the LIH victim's household members admitted that their food consumption has decreased post crash, while 6.5% of the HIH victim's household members admitted that their food consumption has decreased post crash.

CHART 13: RESPONSES ON WHETHER FOOD CONSUMPTION FOR HOUSEHOLD MEMBERS DECREASED



PROPORTION OF VICTIMS THAT FACED ANY DISABILITY:

In Uttar Pradesh, a higher proportion of LIH victims faced disabilities than HIH victims. 76 (37.1%) of the respondents from LIH reported a disability. Among them, 32.9% of LIH reported a serious disability (*Note: No HIH reported a disability).

TABLE 2: RESPONSES ON WHETHER VICTIMS FACED A DISABILITY

| Particulars | LIH | | HIH | |
|---------------|-----|--------|-----|------|
| | N | %Yes | N | %Yes |
| Uttar Pradesh | 205 | 37.10% | 83 | -- |

PROPORTION OF HOUSEHOLDS, WHERE FAMILY MEMBERS FACED DEPRESSION

In Uttar Pradesh, 62.6% of LIH and 19.4% of HIH reported that the victim or a household member suffered from depression post the crash.

CHART 14: RESPONSES ON WHETHER THE VICTIM/ HOUSEHOLD MEMBER SUFFERED FROM DEPRESSION

Chart 14a: Responses on whether victim/ household member suffered from depression: LIH

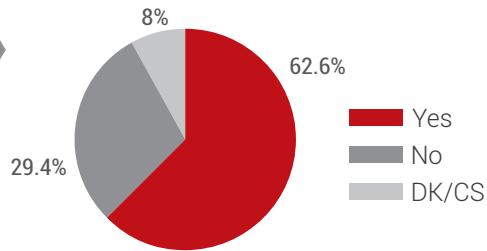
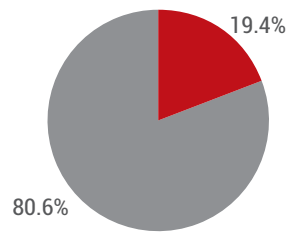


Chart 14b: Responses on whether victim/ household member suffered from depression: HIH



DIFFICULTY IN SLEEPING FOR THE HOUSEHOLD MEMBERS POST CRASH:

In Uttar Pradesh, as high as 49.1% of the household members from LIH faced difficulty in sleeping, while 3.2% of the household members from HIH faced the same.

CHART 15: RESPONSES ON WHETHER HOUSEHOLD MEMBERS HAVE DIFFICULTY IN SLEEPING

Chart 15a: Responses on whether household members have difficulty in sleeping (LIH)

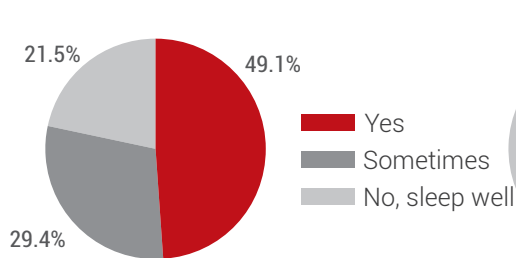
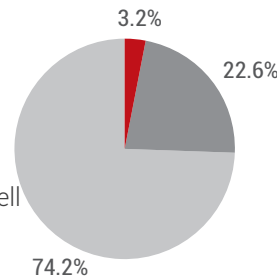


Chart 15b: Responses on whether household members have difficulty in sleeping (HIH)



EMPLOYMENT STATUS OF VICTIMS:

In Uttar Pradesh, LIH on an average, took 73 more days than HIH to return to their previous occupation, with LIH taking an average of 129 days to return to their occupation and HIH taking 56 days for the same. Further, on an average it took LIH 105 days to find a new occupation. (Note: No HIH shifted to a new occupation).

RESPONSES ON WHETHER AN FIR WAS FILED FOR THE ROAD CRASH THAT THE VICTIM WAS INVOLVED IN:

In Uttar Pradesh, 50.6% of the LIH and 50.5% of the HIH claim that no FIR was filed for the road crash case that the victim was involved in.

CHART 16: WAS AN FIR FILED FOR THE ROAD CRASH THAT THE VICTIM WAS INVOLVED IN?

