



**Accidents in the
Automobile
Industry in Gurgaon :
Case Studies
and Stakeholder
Response**

What Can Safeguard Workers?



A SafeInIndia - Agrasar Research

Foreword

Henry Ford is reputed to have complained that when he wanted only a pair of hands, he would get an entire human being. He did not want to deal with the human aspirations and dissatisfactions of his workers. He only wanted them to work fast and accurately, and without complaint, much like his machines. Ford's assembly lines were very efficient and Ford's model of manufacturing ruled the world until the Japanese put human beings' minds back into the production process, to experiment, to learn, and to make continuous improvements. Thus Japanese companies overtook their much larger American competitors.

Human beings are the only 'appreciating assets' in an enterprise that can increase their own performance capabilities, if they are respected and motivated. The capabilities of all other resources - machines, materials, and building - decrease with time. But human beings, if well treated and motivated, can increase the productivity of machines and materials just as the Japanese example illustrated.

It is unfortunate to see the owners and managers of manufacturing enterprise in India missing this fundamental point. Indian manufacturing will not catch up and stay sustainably ahead of global competition, if the minds and hearts of workmen are not engaged for the betterment of enterprises. Workmen cannot be seen as mere costs, or only hands to be hired through contractors, so that the principal employer can avoid dealing with their human needs for care and compassion.

Surely the deterioration of an employers' humanity has gone too far, as this study by SafeInIndia shows, when workmen are even losing their hands at work because employers do not invest in providing safe working conditions for them. **How much cost is really saved by the employer due to these short-term compromises, compared to the tragic, life-long costs for poor workers wishing merely to earn a decent wage to maintain their families?**

These are not only cost matters but moral questions too, strongly linked with the creation of sustainably competitive manufacturing enterprises, at the heart of which must be their only appreciating assets - human beings.



Arun Maira
22 September 2015
Former Member - Planning Commission of India
Former India Chairman - Boston Consulting Group
Author - Remaking India

Acknowledgement

No work of this nature can be completed to any level of satisfaction without the support of many. Our journey started in the beginning of 2015 when Surpiya Sharma, a passionate and acclaimed journalist, brought her alarming findings on the subject of worker safety in the Indian automobile industry to our attention. We owe immense gratitude to her, to kindle a passion in the three of us, who had little direct experience on worker safety issues. Our passion has only grown stronger as we have learnt more. As we started falling short of our own funds and mental and physical resources, we launched a small crowd-sourcing campaign, and after a slow start, were overwhelmed by the response from various quarters. Not only did we raise more than our target funds, even more importantly we gained a number of supporters. Thank you donors for your generous contributions and unconditional support.

As we dug deeper, inevitably, more questions arose and we needed expert help. We extend our gratitude to Rajiv Khandelwal, CEO, Aajeevika Bureau; Bama Athreya, Specialist Labour and Employment Rights, USAID; Vinnie Mehta, Director General, ACMA; MM Singh, Director MACE; Anand Seth, Sona Koyo; Sandeep Jain, Directore, Solo; Atul Batra, Director, Arjan Auto; Shiv Nath, Mazdoor Ekta Manch; Jitender, Workers Solidarity Centre; IV Rao, Former Managing Exective Officer, Mr Arvind Bhondarkar, Head of Safety, Tata Motors and Kishalay Bhattacharjee, journalist and author. You have corrected many of our errors; any errors and ommissions still left in the report are entirely our shortcoming. It's because of you that we feel we are on the right track. We would also like to thank our volunteers Ritika Agarwal, Radhika Dhall, Tisha Srivastava, for providing a fresh perspective and for supporting us in the robustness and editing of the document. We hope you feel proud of this work.

And lastly, the most important stakeholder; those 20 workers, who agreed to share their personal experiences with us. By doing so, they have taken some personal risk, and we are humbled by their courage & support. We will do our best to keep up to their expectations. And we now carry the responsibility to live upto their expectations & hopefully make a positive difference to their and their colleagues' lives.

There are limitations of this study and we know that we can unpeel the onion further. Personally, we are still not completely satisfied with the depth of our understanding of the issues involved but we are now on the journey. This is a huge, global issue that accelerated with industrial revolution. However, we do believe that we are at a stage now, where we have a better sense of a few pragmatic win-win solutions that will make a sustainable dent in this problem.

Over the next few months, we shall further debate and improvise on our ideas with experts and workers, and then initiate implementation. However, none of that will be possible without support from automobile manufacturers, the relevant government and public-private organisations, related civil society organizations and the worker community. We thank in advance all those who we hope to connect with and work with, in future.

You are our pillars of strength and you haven't heard the last of us.

Team SafeInIndia & Team Agrasar

Table of Contents

Executive Summary	5
1 Background: Overview of Automobile Industry in India	8
1.1 Automobile Industry in and around Gurgaon	9
1.2 Contractual workers i.e. not permanent employees: The backbone of automobile industry	10
1.3 Accidents in Automobile Industry in Gurgaon	11
1.4 Regulatory environment for health & safety of workers	11
2 SafeInIndia: Enabling a safe work environment for workers in Gurgaon	14
3 Study Objectives	17
4 Approach and Methodology	18
5 Brief Case Studies & Analysis	19
5.1 Case Study # 1 - Neeraj	21
5.2 Case Study # 2 - Om Kumar	22
5.3 Case Study # 3 - Ravi Chaudhary	23
5.4 Case Study # 4 - Sunil	24
5.5 Case Study # 5 - Surender	25
5.6 Case Study # 6 - Suraj	26
5.7 Case Study # 7 - Raja Shah	27
5.8 Case Study # 8 - Visheshwar Ray	28
5.9 Case Study # 9 - Pradeep	29
5.10 Case Study # 10 - Rohit	30
5.11 Case Study # 11 - Ravinder	31
5.12 Case Study # 12 - Ashok Kumar	32
5.13 Case Study # 13 - Birpal	33
5.14 Case Study # 14 - Collector	34
5.15 Case Study # 15 - Santosh Kumar	35
5.16 Case Study # 16 - Yashbir	36
5.17 Case Study # 17 - Dushrath	37
5.18 Case Study # 18 - Indrajeet	38
5.19 Case Study # 19 - Manoj	39
5.20 Case Study # 20 - Devender	40
6 The Other Side: Understanding the Perspective of Doctors, Factory Supervisors/Owners & ESI Officials	41
7 Research Findings	44
7.1 Pre-Accident: Common Factors contributing to accidents	45
7.2 Post-Accident: support available to workers post accident	49
8 ESI: Understanding the void in regulatory environment	52
9 Areas of exploration for possible interventions	55
9.1 Prevention of accidents:	56
9.1.1 Improve Safety-Awareness & Training of the workers and supervisors	56
9.1.2 Improve Awareness & Training of the management & contractors in areas of:	57
9.1.3 Improve safety-performance in OEM end to end supply chain	57
9.1.4 Strength the role of civil society through:	
57	
9.2 Treatment and Rehabilitation of workers	57
9.2.1 Improving the ESI process through:	57
9.2.2 Rehabilitation of the injured workers	57
10 Limitations of the Study	59

11	Scope for further research	60
12	Appendix 1 - Sampling Strategy	61
13	Appendix 2 - Approximate estimation of Incidence of Accidents	66
14	Appendix 3 - Summary of Pre-accident influencers	67
15	Appendix 4: Summary of Post-accident influencers	67
16	Appendix 5: Individual profiling across accidental parameters	69
17	Appendix 6: Leading automobile manufacturing industries in Gurgaon	70
18	Appendix 7: Details of experience with ESI services for all the accident workers	71
19	Appendix 8: Detailed Case Studies	73
19.1	Case Study # 1 - Neeraj	74
19.2	Case Study # 2 - Om Kumar	76
19.3	Case Study # 3 - Ravi Chaudhary	78
19.4	Case Study # 4 - Sunil	80
19.5	Case Study # 5 - Surrender	82
19.6	Case Study # 6 - Suraj	84
19.7	Case Study # 7 - Raja Shah	86
19.8	Case Study # 8 - Visheshwar Ray	88
19.9	Case Study # 9 - Pradeep	91
19.10	Case Study # 10 - Rohit	93
19.11	Case Study # 11 - Ravinder	95
19.12	Case Study # 12 - Ashok Kumar	97
19.13	Case Study # 13 - Birpal	99
19.14	Case Study # 14 - Callector	101
19.15	Case Study # 15 - Santosh Kumar	103
19.16	Case Study # 16 - Yashbir	105
19.17	Case Study # 17 - Dushrath	107
19.18	Case Study # 18 - Indrajeet	109
19.19	Case Study # 19 - Manoj	111
19.20	Case Study # 20 - Devender	113

Executive Summary

India's auto industry, with an annual production of 23.37 million vehicles in the financial year 2014-15, is one of the largest in the world¹. In addition to the domestic car and two-wheeler brands, it is also very attractive for global car and two-wheeler manufacturers – for both domestic auto sales and sourcing of components for their global operations. It therefore attracted foreign direct investments (FDI) of USD 12.2 billion during the five-year period April 2000 to February 2015². Government of India also supports this industry through a variety of favorable policies. For instance, in February 2014, excise duty on small cars, scooters, motorcycles and commercial vehicles was reduced from 12 per cent to 8 per cent to boost the 'Make in India' initiative of the Indian government.

The industry has several manufacturing clusters in India, of which the Delhi-Gurgaon-Faridabad region is one among **the largest** four. This region is home to many Original Equipment Manufacturers (OEM), and Sub Contractor manufacturers ranging from tier-1 to tier-3 who employ over 80,000 workers across a very large number of factories in the region. This Study focuses only on the Gurgaon-Manesar belt within this larger region.

Despite, and to some extent due to, its growth and success, more than a thousand workers meet with serious accidents just in the Gurgaon-Manesar belt every year. Most of these accidents lead to permanent disabilities, followed by either a loss of or significant deterioration in the employment of such injured workers. Unsurprisingly, while laws regarding work place safety, post-accident care and compensation do exist, there is an absence of strong and effective institutional mechanisms to support their implementation. This had led to unnecessarily hazardous working conditions, a low level of safety consciousness and training and inadequate post-accident treatment, care, compensation and rehabilitation. Injured workers are therefore often left with long term psychological and physical damage, with it consequent financial implications.

Suraj, one of thousands of such cases, is an 18 yr old immigrant from Buland Shahar, UP, who lost two fingers of his right hand, on the third day of his first job in a die machine in a small tier-3 silencer-manufacturing unit. Now, with no permanent employment and afraid of working in a similar environment again, he also refuses to share the news of this accident and his new financial reality with his family, who are busy preparing for his sister's marriage, less than a month away.

Can “Make in India” be successful and sustainable without the safety and long-term productivity of Indian workers?

In this context, team SafeInIndia, has embarked on a journey to understand these issues better, and to devise and implement pragmatic actions that are win-win for workers and manufacturers, by bringing together key stakeholders for collaborative sustainable action.

While important literature is available on the Indian regulatory environment, relatively little analysis using ethnographic tools to capture the experiences of injured exists. Therefore, as a first step, SafeInIndia partnered with Agrasar, to conduct this research

¹ <http://www.ibef.org/industry/india-automobiles.aspx>

² According to the data released by Department of Industrial Policy and Promotion (DIPP)

to understand the causes and effects of (mainly) crush injuries suffered by 20 workers in the automobile manufacturing sector in Gurgaon-Manesar belt.

The research has highlighted several actionable findings, some of which are:

1. **Pre-accident:**

- a. In almost all cases (16 out of 20), there was no training provided to workers
- b. In 8 of 20 cases, there was no system of machine/safety regulation inspections in the factories. In another 5 cases, the safety inspections were irregular and ad-hoc.
- c. No automatic safety control system was found in 14 out of 20 cases.
- d. Appropriate quality safety gear/equipment was not provided in any of the cases.
- e. Very few workers (only 8 out of 20) had ESI cards prior to the accident, risking their post-accident care and compensation. However, in almost all cases, workers' knowledge of ESI processes was inadequate.
- f. The age profile of accident victims varied from 18 years to 52 years; however, the majority (15 out of 20) were under 23 years of age.

"I have never received any formal training on running the machine or safety measures in any of the four companies that I have worked with." - Visheshwar, working in a tier-2 factory

2. **Post-accident:**

- a. In half of the cases post accident, employers showed complete apathy, especially where the worker was easily replaceable.
- b. Most workers (14 out of 20) were first treated at small private hospitals instead of ESI hospitals. The choice of hospital appeared to be influenced by convenience, previous experience of dealing with similar accidents at workplace, distance to the hospital, and availability of doctors during evenings and night shifts at the concerned hospital. The employers and employees due to ESIC's time-consuming procedures and attitude saw ESI hospitals as unattractive. Though not clearly evident, preference towards private hospitals was often driven by non-compliance of employers towards ESI registration and procedures.
- c. In 18 cases, the victims lost their jobs after the accidents.

"There is no safety inspection or supervision done in the factory. If somebody is found flouting the safety norms he is simply ignored" - Sunil, working in a tier-3 factory

In addition, 19 out of 20 accident victims were from tier-2 and tier-3 factories highlighting the shortcomings that exist in the safety protocols and infrastructure in such units.

In spite of having a good legal framework in the form of the Factories Act, 1948, the Employees' Compensation Act, 1923, Contract Labour (Regulation and Abolition) Act, 1970 and the ESI Act (and other related acts) for the protection of workers, India suffers from the chronic problem of lapses in implementation. The researchers focused on ESI, an important law/facility at the time of and after an accident; secondary research, found

significant shortcomings in ESI facility inspections and in recruitment of doctors; lack of basic amenities and equipment at ESI designated facilities and often apathy among the ESI officials in monitoring the overall ESI service delivery process³. Some of these findings are supported by actual experiences of workers interviewed for this report. This research has indicated three broad areas of possible intervention, which will be evaluated and prioritized with guidance from industry experts including the workers:

1. **Prevention of accidents** through initiatives that improve safety consciousness among workers as well as manufacturers. For example, training for workers/management, an improvement in supply chain safety audit from OEM/Tier 1 manufacturers and sharing of best safety practices that also deliver long-term productivity gains.
2. **Improvement in treatment and rehabilitation** of injured workers through initiatives that minimize the residual disability among accidental victims and help them adapt to their best possible future and reach their potential. For example, better immediate post-accident treatment, a more effective ESI process and a system to identify appropriate roles for injured workers.
3. **Improvement in Government Policies and their Implementation** through advocacy and/or activism. For example, better implementation of labor laws and safety regulations, address shortage of safety inspectors and revision of antiquated laws.

Indeed, there may be other areas where this situation needs corrective action. Team SafeInIndia will now focus on win-win sustainable solutions in areas 1 and 2 above in the short to medium term. Changes and improvement in government policies, though desirable and necessary, are a long-term goal.

³ http://www.saiindia.gov.in/english/home/public/Inper cent20_Media/30of2014.pdf



Part 1

Background: Overview of Automobile Industry in India

Background: Overview of Automobile Industry in India

The Indian auto industry is one of the largest in the world with an annual production of 23.37 million vehicles in the Financial Year (FY) 2014-15. India is also one of the largest auto-component exporter with significant growth expectations in the near future. Various initiatives by the Government of India (GoI) and major automobile players in the Indian market are expected to make India a leader in the Two Wheeler and Four Wheeler markets in the world by 2020.

To match production with demand, many automakers have recently started to invest heavily in various segments of the industry. The industry has attracted foreign direct investment (FDI) worth US\$ 12.2 billion during the period April 2000 to February 2015, according to the data released by the Department of Industrial Policy and Promotion (DIPP).

The Government of India encourages foreign investment in the automobile sector and allows 100 per cent FDI under the automatic route. Excise duty on small cars, scooters, motorcycles and commercial vehicles was reduced in February 2014 from 12 per cent to 8 per cent to boost the **'Make in India' initiative** of the Indian government. The Automobile Mission Plan⁴ (AMP) for the period 2006-2016, designed by the government is aimed at accelerating and sustaining growth in this sector. The vision of AMP 2006-2016 sees India, "as the destination of choice in the world for design and manufacture of automobiles and auto components with output reaching a level of US\$ 145 billion; accounting for more than 10 per cent of the GDP and providing additional employment to 25 million people by 2016."

Industry at a glance

The industry currently accounts for almost 7 per cent of the country's GDP and employs about 19 Million people both directly and indirectly.

India is currently the seventh-largest producer in the world with an average annual production of 17.5 Million vehicles, of which 2.3 Million are exported.

The Indian automobile market is estimated to become the 3rd largest in the world by 2016 and will account for more than 5 per cent of global vehicle sales.

India is the second-largest two-wheeler manufacturer, the largest motorcycle manufacturer and the fifth largest commercial vehicle manufacturer in the world.

The total industry turnover of USD58.5 Billion in 2010-11 is expected to grow to USD 145 Billion by 2016.

1.1 Automobile Industry in and around Gurgaon

The Delhi-Gurgaon-Faridabad region is one of the four major clusters of automobile manufacturing in the country. GoI has identified the Gurgaon-Manesar-Bawal region as an Automobile Hub. Local presence of companies like Maruti-Suzuki, Hero-Moto-Corp and Honda Motorcycles & Scooters India Private Limited has led to the development of a large number of ancillaries in this region⁵.



⁴ http://www.saiindia.gov.in/english/home/public/Inper cent20_Media/30of2014.pdf
⁵ http://www.saiindia.gov.in/english/home/public/Inper cent20_Media/30of2014.pdf

The industry can be broadly divided into the following types of manufacturers:

Type of Manufacturer	Unique Features
Original Equipment Manufacturer (OEM)	Major market players and manufacturers in two wheeler & four wheeler segment
Tier 1 Subcontractor	Suppliers to OEMs Defined processes & customized training of workers
Tier 2 Subcontractor	Suppliers mainly to Tier-1 subcontractors Majority workforce is non-permanent/contractual workers
Tier 3 Subcontractor	Suppliers mainly to Tier-2 subcontractors Majority workforce is non-permanent/contractual workers

The tier 1-3 sub-contractors span a wide spectrum, ranging from large-scale facilities with state of the art technology to village huts using primitive production techniques. Often auto parts pass through many tiers before they end up at an OEM like Maruti or Hero Moto-Corps main factory. For example, rubber hoses for carburetors arrive in the form of rubber blocks in villages surrounding the industry. In another village, door hinges are galvanized in small garages.

The OEMs have relatively the highest standards of safety on the Shop Floor as they need certifications from various national and international agencies and have to adhere to safety rules. As per ISO⁶, the OEMs are also mandated to instruct and inspect the Tier-1 subcontractors for safety standards. **However, other manufacturers including many of the Tier 2 and 3 are not required to be controlled by OEMs/Tier 1 manufacturers and operate at widely varying safety standards. Ironically, these tier 2 and 3 players account for more than 80 per cent of the workforce⁷ in the automotive sector in Gurgaon and working conditions in many of these units are often hazardous and highly risk-prone.**

1.2 Contractual workers i.e. not permanent employees: The backbone of automobile industry

The Gurgaon automobile industry receives immigrant workers from various states of the country especially from Uttar Pradesh, Rajasthan, Haryana and Bihar. These migrants leave their families behind with aspirations to earn a stable income and send most of their salary back home. A majority of these workers are unskilled and reach out to small formal and informal contractors (called Thekedars) for work through networks of relatives or friends who are already established in the industry. Many a times, the workers, bring along their friends and relatives from the villages, to work with them in the industry. The workers stay in small slums/shared rooms in and around the factories and are often dependent on each other for shared resources.

The contractors are connected with manufacturing units across tiers and are responsible for regular provision of contractual workforce. A contractual worker has no direct agreement with the factory owners but is employed by the contractor. As per the

⁶ International Organization for Standards

⁷ As per the National Skill Development Corporation (NSDC) Skill Gap Report in automotive sector and expert interviews

laws, all provisions defined under the Contract Labour (Regulation and Abolition) Act, 1970 are applicable to contract labourers. However, unfortunately the regulation and implementation of this Act is more on paper than practice.

Only around 10 per cent of the total workforce in the industry comprises of permanent employees and is on the payroll of the factories. These workers are often part of small unions, which exist in some of the factories. The remaining 90 per cent are contractual workers with little identity or protection.

1.3 Accidents in Automobile Industry in Gurgaon

Every year, more than a 1,000 workers in Gurgaon-Manesar region, meet with serious accidents. Most of these lead to permanent disabilities with a consequent loss of employment and income. This happens despite a slew of safety laws and monitoring agencies. With estimated 80,000 workers in Gurgaon, working in the automobile industry, such incidents are only increasing by the day.

“In every factory, you would find at least ten boys with broken fingers,” said Kumar, a factory worker during an interview⁸, highlighting the gravity of the situation and the insensitivity and ignorance towards the same.

In a recent accident in Aug 2015, an⁹ industrial robot killed a 23-year-old employee of an automobile factory while the employee was trying to fix a metal sheet that had dislocated. It was subsequently reported that in this factory, 113 out of 118 robots lack sensor barriers.

However, these accidents are not a recent phenomenon. In 2005, the International Labor Organization published a report on work-related accidents around the world. It pointed out a strange anomaly: India had reported 222 fatal accidents that year, while the Czech Republic, with a working population of about 1 per cent of India's, had reported 231. The ILO estimated that the “true number of fatal accidents” taking place in India every year was 40,000. However, as a result of under-reporting, the total number of fatal accidents recorded in a year is much below the actual number of accidents.

1.4 Regulatory environment for health & safety of workers

Working conditions and the nature of employment tend to have major repercussions on the health of a workman. Indeed, the concept of ‘Occupational health’ has evolved from work-related ailments and is defined as any injury, impairment or disease affecting a worker or employee during his course of employment. Legislation on occupational health and safety has existed in India for several decades, including the following:

The Factories Act, 1948: The Factories Act, 1948 was enacted with the object of protecting workers from being subjected to unduly long hours of bodily strain or manual labour. The Act lays down in detail the provisions relating to the health, safety and welfare measures, namely, cleanliness, level of ventilation, diversion of dust and fumes, provision of artificial humidification, sanitation, fencing of machinery, among

⁸ <http://scroll.in/article/692477/your-car-has-been-built-on-an-assembly-line-of-broken-fingers>

⁹ <http://www.dnaindia.com/india/report-after-manesar-incident-gathering-data-about-unmanned-robots-in-gurgaon-factories-to-be-an-uphill-task-2116421>

others. However, as the Act is applicable only to factories that employ 10 or more workers, it covers only a small proportion of workers. The Act mandates that a State Government appoint qualified medical practitioners as 'certifying surgeons' to discharge the following duties:

1. Examination and certification of young persons and examination of persons engaged in 'hazardous occupation'.
2. Exercising medical supervision where the substances used or new manufacturing processes adopted may result in a likelihood of injury to the workers.
3. Exercising medical supervision in case of young persons to be employed in work likely to cause injury.

The Employees' Compensation Act, 1923: The general principle is that a worker who suffers an injury in the course of his employment, which results in a disablement, should be entitled to compensation and in the case of a fatal injury his dependents should be compensated. Under the Employees' Compensation Act, it is the employer who is responsible to pay compensation (as opposed to the ESI). Every state Government is required to appoint a Commissioner to decide the liability of an employer to pay compensation, the amount and duration of compensation, among other issues. An appeal may be made to the High Court in case the applicant is grieved with the Commissioner's orders. Compensation is decided on the nature of injury caused, wage group of the victim and the duration of employment with the company.

The Contract Labour (Regulation And Abolition) Act, 1970: The Object of the Contract Labour Regulation and Abolition) Act, 1970 is to prevent exploitation of contract labour and also to introduce better conditions of work. The Act applies to the Principal Employer of an Establishment and the Contractor where in 20 or more workmen are employed or were employed even for one day during preceding 12 months as Contract Labour. This Act does not apply to the Establishments where work performed is of intermittent or seasonal nature. Section 9 of the Act provides that if the Principal Employer, to whom this Act is applicable, fails to get registered under the Act, and then such Principal Employer cannot employ contract labour. It also appears that if the Establishment is not registered or if the Contractor is not licensed then the contract labour shall be deemed to be the direct workmen and the Principal Employer or the Establishment shall be liable for the wages, services and facilities of the contract labour etc.

The Employees' State Insurance (ESI) Act, 1948¹⁰: This is an integrated social security scheme tailored to provide social protection to workers and their dependents, in contingencies, such as, sickness, maternity and death or disablement due to an employment injury or occupational hazard. The ESI Act applies to the following categories of factories and establishments in the implemented areas:

- Non-seasonal factories using power and employing ten or more persons
- Non-seasonal and non-power using factories and establishments employing twenty or more persons

The "appropriate Government", State or the Centre is empowered to extend the provisions of the ESI Act to various classes of establishments, industrial, commercial or agricultural or otherwise. Under these enabling provisions most of the State Governments have extended the ESI Act to certain specific class of establishments, such as, shops, hotels, restaurants, cinemas, preview theatres, motors transport undertakings and newspaper establishments etc., employing 20 or more persons. The

ESI Scheme is mainly financed by contributions raised from employees' covered under the scheme and their employers, as a fixed percentage of wages. Employees' of covered units and establishments drawing wages upto Rs.15, 000/- per month come under the purview of the scheme for social security benefits. However, employee's earning upto Rs.100/- a day as wages are exempted from payment of their part of contribution.

Benefits available to employees' covered under ESI Act include:

- Sickness benefit: This benefit is available to the insured employee during sickness in the benefit period. The employees' contribution should be not less than 78 days of the corresponding contribution period. Sickness benefit is not available for the first two days of sickness. The maximum period for which sickness benefit can be available is 91 days in one year.
- Maternity benefit: Maternity benefit for confinement/pregnancy is payable for around 85 days, which is extendable by further one month on medical advice at the rate of full wage subject to contribution for 70 days in the preceding year.
- Disablement benefit (temporary or permanent): Temporary disablement benefit (TDB) is provided to an employee from day one of entering insurable employment & irrespective of having paid any contribution in case of employment injury. TDB at the rate of 90 per cent of wage is payable so long as disability continues. If an employee suffers from temporary disablement, he/she can seek the benefits of unemployment cash benefit, where he/she gets around 26 days of his salary each month. Permanent disablement benefit (PDB) is paid at the rate of 90 per cent of wage in the form of monthly payment depending upon the extent of loss of earning capacity as certified by a Medical Board.
- Dependents benefit: Dependents benefit is paid at the rate of 90 per cent of wage in the form of monthly payment to the dependents of a deceased insured person in cases where death occurs due to employment injury or occupational hazards.
- Medical benefit: Full medical care is provided to an insured person and his/her family members from the day he/she enters insurable employment. There is no ceiling on expenditure on the treatment of an insured person or his/her family member. Medical care is also provided to retired and permanently disabled insured persons and their spouses on payment of a token annual premium of Rs. 120.
- Funeral expenses: A lump sum payment of not more than Rs. 3,000 towards expenditure on the funeral, of a deceased insured person, is paid either to the nominee/dependent.

According to the Employees' State Insurance Corporation (ESIC) rule, all accident related benefits could be availed by the temporary ESIC card. All other benefits like sickness benefit and maternity benefit can be availed only with a permanent ESI card.

¹⁰ www.esi.nic.in



Part 2

SafeInIndia: Enabling a Safe Work Environment for Workers in Gurgaon

Accidents in the Automobile Industry in Gurgaon:
Case Studies and Stakeholder Response
A SafeInIndia - Agrasar Research

SafeInIndia: Enabling a safe work environment for workers in Gurgaon

In December 2014, a news feature written by journalist, Ms. Supriya Sharma, Editor, scroll.in, a national news website brought attention to the fact that accidents that crush limb(s) are taking place at an alarming rate in the automobile industry in Gurgaon, Haryana. She reported that almost 20 accident cases present themselves daily in a single hospital.

A forum of responsible citizens - '**SafeInIndia**', led by Mr. Prabhat Agarwal, Mr. Ravi Gulati and Mr. Sandeep Sachdeva took up the responsibility to understand this issue and work towards finding and implementing solutions to make a positive difference. SafeInIndia aims to work in partnership with workers and the automobile industry in Gurgaon to create safer conditions for them. In the first phase, the team has collaborated with Agrasar to conduct a qualitative research to understand the complex scenario and create introductory awareness. This will be followed by concrete work on practical and pragmatic win-win solutions that the team will develop based on the findings of this research.

Agrasar is a non-profit organization working in the field of human capacity development and social security of the disadvantaged communities in India. Agrasar has trained and placed over 3,000 youth in different sectors - Retail, BPO, Garment Manufacturing etc., since 2011. The organization has recently completed a research study, supported by the Tata Trust, to understand the issues and challenges faced by migrants in Gurgaon and to design possible solutions to deal with issues relating to - Education, Health, Identity, Employability, Workplace Safety, etc. The organization has also conducted research studies on skill-gap in the districts of Gurgaon, Palwal, Baddi and Haridwar.



Part 3

Study Objectives

Part 4

Approach and Methodology

Study Objectives

The research has the following objectives:

1. To identify key reasons for and consequences of crush injuries in automotive manufacturing in Gurgaon.
2. To establish a qualitative understanding of pre and post-accident factors and their lasting effects on the lives and livelihoods of workers.

The research has been designed with the purpose of recommending pragmatic solutions to reduce the incidence of accidents in the automobile industry and suggest mechanisms to provide rehabilitative care to injured workers.

Approach and Methodology

Considering the objectives of the research, a multiple (comparative) case studies approach has been adopted to understand various pre-accident and post-accident facets of the issue under consideration. Twenty accident victims have been interviewed in depth.

Multiple-case design with replications have also provided valuable insight into the occurrence and significance of identified factors. To further enhance the validity of the findings, specific information has been gathered from stakeholders such as doctors and industry experts.

Each case study addresses the following key questions:

- A. What is the socio-economic context of the subject?
- B. What are the critical factors that had played a role in incidence of the accident?
- C. What is the attitude of management towards accidents as reflected by the preventive actions being taken?
- D. What are the key technological factors (manual/ automated machines, integrated safety mechanisms, etc.) that led to the accident?
- E. What is the attitude of worker towards importance of safety?
- F. How have the various stakeholders reacted to the event?
- G. What are the ground realities related to implementation of the Employee's State Insurance (ESI) Scheme? How does it impact the pre-accident and post accident circumstances of the accident victims?
- H. What are the legal options that accident victims have? What sort of options do they generally pursue? What is their ability to take a particular recourse?
- I. What impact does the accident have on life in general and career in particular for the subject?

For detailed 'Sampling Strategy' refer Appendix 1.

Quantification of the occurrence of accidents is annexed in Appendix 2.



Part 5

Case Studies & Analysis

Accidents in the Automobile Industry in Gurgaon:
Case Studies and Stakeholder Response
A SafeInIndia - Agrasar Research

Case Studies & Analysis

As part of the research, 20 workers with workplace accidents were interviewed through personal interviews and interactions. During the interviews and discussions, emphasis was placed on the following key aspects:

1. Pre-accident parameters:
 - a. **Safety Training:** Insights into the existing levels of training provided to workers as part of the induction process/ on-going work experience
 - b. **Safety Inspection:** Role of supervisors and emphasis on ensuring high safety standards by the factory
 - c. **Safety Mechanism:** Presence of adequate safety mechanisms in machines
 - d. **Machine Maintenance:** The need and frequency of safety related maintenance of machines and role of workers and supervisors
 - e. **Availability of Safety Gear:** The availability of adequate safety gear like gloves and shoes for the workers
 - f. **Quality of Gear:** Quality and adequacy of available safety gear
 - g. **Work Pressure:** Details about the work load & shifts of workers
2. Post accident parameters:
 - a. **Employer's attitude:** The support and guidance, if any, provided by the employer immediately after the accident and during initial recovery
 - b. **Worker's attitude:** Attitude of workers towards their own safety and compliance with existing norms even after witnessing such accidents
 - c. **Contractor's attitude:** Post accident support provided by the contractor to the workers
 - d. **Services at ESI:** If an ESI hospital was visited, quality of experience and treatment at the hospital
 - e. **Employability and Social Security:** Impact of accident on the worker's quality of life

Across all the factors, the responses, roles and effectiveness of stakeholders and interventions have been graded as per the following color-coding:

Red Color: High effect, Yellow: Low effect, Green: No effect, White: No Role in particular case, Numbers (1-20): Case Study Numbers, N/A: Stakeholder not applicable in a particular case, E: Employer

Case Study #1

Neeraj

20-year-old Neeraj is from Kannauj, Uttar Pradesh. While working on a power press machine in a tier-2 auto-part manufacturing unit, he lost all the fingers of his left hand as he was trying to remove a small component stuck in the machine. He had only recently started contributing to his family's income, and following this accident, the financial burden has again shifted on to his father's lonely shoulders. Neeraj, the eldest sibling in a family of six, and his father were the only two earning members, with combined monthly income of Rs. 12,000 (USD180). With the loss of Neeraj's income, the family is now again finding it difficult to make ends meet.



MAJOR CAUSES OF ACCIDENT

- Malfunctioning of the machine.
- No training provided to the workers.
- Lack of importance given to safety in the factory.
- No safety sensors in the machine.

IMPACT OF ACCIDENT

- All the fingers of his left hand have been severed, significantly reducing his chances of ever assuming a skilled role.
- The entire responsibility of the family is now on his old father and the family is unable to meet their daily living expenses.
- No job security; the employer ignores his requests completely.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer is not ready to listen to him. He was not allowed to meet the management and is not allowed to enter the factory premises.

CONTRACTOR

The employer is not ready to listen to him. He was not allowed to meet the management and is not allowed to enter the factory premises.

ESIC

Although he is receiving ongoing post-accident care at the ESI hospital, he is struggling to get it on a timely and effective basis.

UNION

He has not approached the unions so far as he is unaware of any precedents of contractual co-workers having been helped by the Unions.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #2

Om Kumar

27-year-old Om Kumar, from Aligarh Uttar Pradesh, lost his left hand in a press shop in a tier 2 factory that makes horns for two wheelers. While repairing the die press, his hand was still inside the machine when the fellow machine operator's foot accidentally pressed the paddle, activating the press. This resulted in the amputation of Om Kumar's hand. Though he has rejoined the same factory, he can no longer work as a skilled worker on machines. His pre-accident income of Rs. 9600 (USD150) per month has been reduced substantially as he has been moved to the records department and retained at a much lower salary. Although, his brother has opened a small mechanic shop, the duo is unable to meet family expenses.



MAJOR CAUSES OF ACCIDENT

- No safety mechanism in the machine such as a sensor.
- No safety training for the workers, only safety charts are displayed; some of the workers can't read & remain unaware of the content.
- Careless attitude of the co-workers.

IMPACT OF ACCIDENT

- Left hand severed from the arm.
- Can no longer work on machines. Now works on computer but at a slow speed.
- Due to loss of one hand he is not sure of progress in the current factory or whether he will be able to get a job anywhere else.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

Immediately after the accident, the employer accompanied Om to ESI hospital. Om has also been allocated a desk job. However, no compensation has been provided & salary has been reduced.

CONTRACTOR

He is not on contract and is on the payrolls of the company. So there is no role for contractors in this case.

ESIC

After giving an injection at ESI hospital, he was referred to a private hospital, causing a four-hour delay during which his severed hand bled constantly. He is now experiencing problems in getting a permanent ESI card

UNION

He has not approached the unions so far as he is unaware of any precedents of contractual co-workers having been helped by the Unions.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #3

Ravi Chaudhary

23-year-old Ravi hails from Aligarh, Uttar Pradesh. He operated an injection-molding machine in a small tier-3 factory that manufactures spare parts for heavy vehicles. On his fifth day on the job, there was an unexpected malfunctioning of the machine and it closed down on its own. Before he could switch off the machine, Ravi's hand got caught in the machine and he lost four fingers and part of his left palm. He is now unable to operate machines with one hand and is also unable to find another. This has made life extremely difficult for the family, as their income has reduced by Rs. 7500 (USD120) per month and his sister is now the only earning member.



MAJOR CAUSES OF ACCIDENT

- Newcomer to the industry with no prior experience.
- Was asked to operate an injection-molding machine, without any formal or informal training.
- Malfunctioning of the machine.

IMPACT OF ACCIDENT

- Loss of one hand.
- Unable to operate any machine now only with one hand.
- Experiencing stressful situation at work with delayed salary. Payments and verbal arguments with the employer who continues to be demanding.
- Unable to move to any other job or any other factory.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer paid for his treatment but is now demanding a return of the treatment expenses. The employer also refuses to give his salary on time and is instead coercing Ravi into handing over the ESI compensation payment.

CONTRACTOR

As Ravi is a permanent employee with the factory, contractors played no role in this case.

ESIC

The employer did not provide the ESI card before the accident and it was made only after the accident. In addition, the treatment at ESI was not administered properly and after repeated requests, he was referred to private hospital.

UNION

Ravi did not contact the union.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #4

Sunil

20-year-old Sunil is from Rai Bareilly, Uttar Pradesh. He lost two fingers of his right hand while working on a manual plastic molding machine in a tier-3 factory, which makes keys and lights for four wheelers. The accident was a result of him accidentally pressing a paddle, unwittingly activating the machine while he was inserting a metal part in the machine. Sunil has since lost his job and along with it his income of Rs.10,000 (USD160) per month. He was the primary breadwinner in his seven-member family and the loss of his income has severely impacted them. Sunil has yet to find another job.



MAJOR CAUSES OF ACCIDENT

- No safety sensors in the machines
- No formal training was given in the factory.
- No safety equipment while working on the machine.

IMPACT OF ACCIDENT

- Two fingers of his main hand have been severed.
- No financial or any other support received from anywhere yet.
- The entire responsibility of taking care of the family is on his brother who is now the sole breadwinner.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

He was on the contractor's payroll. The employer has asked him to be patient, but Sunil has no faith in the employer.

CONTRACTOR

The contractor provided no support to Sunil for treatment.

ESIC

Sunil maintains that the ESI did not provide any proper treatment for his hand and that they were careless about his injury.

UNION

Sunil decided not to approach the union for undisclosed reasons.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #5

Surender

20-year-old Surender is from Alwar, Rajasthan. He operated a forklift machine in tier -2 auto component manufacturer in Gurgaon. A new joinee's negligence led to a severe accident, that resulted in severe injury to his left leg. He had to sell his family land to cover his treatment cost and there are still no signs of complete recovery.



MAJOR CAUSES OF ACCIDENT

- No training is given to newcomers and they are asked to work on powerful machines right away.
- No importance given to safety mechanism.
- Long & tiring shifts.

IMPACT OF ACCIDENT

- Severe left leg injury with some lacerations.
- Sold his only land for treatment.
- No other family member to support the family when he is not able to work.
- No immediate signs of recovery and he is worried about his career.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer has not involved himself in this case, as Surender is not on the factory's payroll. No one from the management has ever visited or asked him once about his injury.

CONTRACTOR

The contractor helped him with the treatment and spent almost Rs. 4 lakhs (USD 6500) on the treatment.

ESIC

The ESI hospital claims that his card is invalid even when he has got it renewed from the branch office of ESI.

UNION

Surender has not approached the union for any support.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #6

Suraj

18-year-old Suraj is from Bulandsehar, Uttar Pradesh. On his third day of the first job, in a small tier-3 silencer-manufacturing unit, he met with an accident & lost two fingers of his right hand. Totally inexperienced, he held the machine cap of the object in a wrong manner due to which the die press got stuck and his right hand was caught in the press shop machine. Still recuperating, he is now extremely scared of working in a similar environment again. He has still not shared this unfortunate incident with his parents and family back home for fear of upsetting them and their plans for his sister's wedding.



MAJOR CAUSES OF ACCIDENT

- No training given and he was straightaway asked to operate the press shop machine.
- No safety mechanism in the machine.

IMPACT OF ACCIDENT

- Loss of two fingers of the right hand.
- Unable to support family financially even when his sister's wedding is next month.
- The elder brother has to bear the full responsibility of the family.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer is his own uncle who runs a small factory. He has taken the responsibility of treatment. However no other support has been provided.

CONTRACTOR

He is a permanent employee with the factory and not on contract. Contractor played no role in this situation.

ESIC

He does not have an ESI card. He is not even aware about ESIC, ESI card and its benefits.

UNION

He is very new to the city and the sector. He is unaware of the unions and has not approached any of them yet.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #7

Raja Shah

23 years old Raja Shah from Bihar operated a press shop machine in a tier -2 factory that manufactures brake shoe for top automobile brands in the country. Pressurized by his supervisor to increase his productivity, he lost control of the machine and lost two fingers of his left hand. While he earned Rs. 5600 (USD80) per month before the accident, he now works as a daily wageworker for a few days a month. The family is struggling to make ends meet due to financial instability.



MAJOR CAUSES OF ACCIDENT

- Has never received any formal training in his career.
- Forced to run the machine faster even while knowing it could be dangerous.
- Pressure to complete targets even when he was unwell.
- Overstretched shifts from 12 hours to 36 hours a day.
- Not allowed to take breaks as those may lead to wastage of electricity.

IMPACT OF ACCIDENT

- Last 2 fingers of his left hand were severed.
- Family struggling to survive, as Raja is not able to support them.
- No other family member to support the family when he is not able to work.
- Father has started working extra time in order to earn more and his health is suffering as result.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer prepared incomplete accident report for ESI. The HR department refused him entry into the office premises. He was asked to contact the contractor, as they believed that it was not the factory's responsibility.

CONTRACTOR

After initial resistance, the contractor supported him by getting his salary released from the employer

ESIC

He was provided initial basic treatment at ESI hospital after four hours of waiting and then referred to a local private hospital. Now he is experiencing problems in obtaining a permanent ESI card.

UNION

He contacted the union and discussed about the case he had filed. Later, he decided to handle the case on his own.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #8

Visheshwar Ray

52 years old Visheshwar is a native of Vaishali district of Bihar. While working on a plastic molding machine, in a tier-2 factory that makes plastic molds for various automobile companies, he met with an accident which led to deformity of his right hand and his fingers now do not have any movement. He and his doctor are not sure whether he can ever be completely cured. While he earned upto Rs.9000 (USD140) per month before the accident, he currently has no income or savings, is unemployed and is surviving on the support of his extended family and community.



MAJOR CAUSES OF ACCIDENT

- No safety mechanism in the machine.
- Huge production pressure leading to work for 24 to 36 hours at stretch.
- No training over last fifteen years in the job.

IMPACT OF ACCIDENT

- Right hand deformed and no movement in fingers.
- Out of job for last five months and surviving on help from people in community.
- Wife forced to migrate to the city to help him and earn the living for family.
- With income taking a drastic hit, Visheshwar is desperate to get any, even an unskilled, job.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

Employer is not helping him with the required medical care or with an alternative job.

CONTRACTOR

Contractor's role is limited to recruitment and maintaining payroll. No support provided.

ESIC

Visheshwar is not clear about the ESI rules and thus struggling to get the ESI benefits. After the accident his benefits were delayed for few months.

UNION

Visheshwar says that they are "outsiders" and cannot form a union. If they try to, they will be expelled from the factory.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #9

Pradeep

19-year-old Pradeep comes from Junjhunu, Rajasthan. While working as a helper on the injection-molding machine, in a tier-2 plastic auto component-manufacturing unit, he met with an accident that severed two fingers of his right hand. Due to lack of knowledge about the functioning of the machine, he accidentally touched the sensor while he was cleaning the machine causing the machine to start while his hand was still inside it. Since, he is the youngest of all siblings, the family has been able to manage the expenses but they are traumatized by the injury and its impact on Pradeep for rest of his life.



MAJOR CAUSES OF ACCIDENT

- Unaware about the functions of the machine, as he was a new joinee and was not informed about the process.
- No work or safety training provided to the workers

IMPACT OF ACCIDENT

- Two fingers and the thumb were severed
- Not working due to the injury, not sure when he'll be able to join back.
- Unsure of his career now as he has lost fingers of his right hand.
- Family's dreams of having better days ahead are now shattered.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer is helping him with the treatment; all the expenses are borne by them. They are even talking about making him permanent and giving compensation.

CONTRACTOR

The contractor is providing him complete support; they have assured him that he will be made permanent.

ESIC

The contractor and HR helped him in getting his leave approved by the ESI. He is not getting his treatment from ESI.

UNION

There exists a union in his factory that is active, and has assured him that his job is secure and he will be made permanent. They have asked him to contact them if he faces any issue.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #10

Rohit

23-year-old Rohit is from Hardoi, Uttar Pradesh. While working on a robotic welding machine, in a tier -2 axle and oil tanks manufacturing unit, he met with an accident. The faulty operation of the clamp led to chopping of the fingers of his left hand. He was the sole breadwinner of his family of seven. His father is also chronically ill.



MAJOR CAUSES OF ACCIDENT

- Malfunctioning of the machine.
- No safety sensors in the machine.
- Uploading of wrong dyes.
- No formal operations or safety training ever provided.

IMPACT OF ACCIDENT

- Two fingers of his left hand were severed and another one has a big cut.
- No job security as the factory has refused to make him permanent.
- Unable to work and support the family since the accident has happened.
- No one else to take care of the household and the family is struggling to survive.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer has not provided any financial help & refuses to make him a permanent employee. Factory has provided him a bed to rest on the premises.

CONTRACTOR

The contractor is helping him to get his treatment and approval of leave from ESI

ESIC

His treatment is still ongoing. So far, he has not faced any problem in his treatment.

UNION

Union was not contacted and the reason for the same was not disclosed.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #11

Ravinder

35-year-old Ravinder comes from Mahendragarh, Haryana. He was operating an injection-molding machine in a tier -2 factory that manufactures press tools, jigs and fixtures. He lost his right hand when a component held by a crane came loose and fell on his hand. He was the lone earning member in the family, who are now in a severe state of financial and emotional distress.



MAJOR CAUSES OF ACCIDENT

- Carelessness of the other workers,
- No job training given to the workers.
- No mechanism in the factory to avoid such accidents.

IMPACT OF ACCIDENT

- His right hand is almost entirely disabled.
- Cannot operate the machine.
- No one else to take care of the family when he is not working.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer is quite helpful. They even supported him to get treatment from a private hospital. Now they have given him work which he is able to do.

CONTRACTOR

He is not on contract & the contractor played no role in this case

ESIC

His wound is now healed and he has been asked to do some exercises. However, no professional medical support has been made available by the ESI and they have asked him to do it at home.

UNION

Did not contact union and the reasons for the same are not known.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #12

Ashok Kumar

21-year-old Ashok, from Nawabpur, Uttar Pradesh met with an accident while working on a die-casting machine, in a tier -2 factory that makes automotive sheet metal parts and welded sub assemblies. Three of Ashok's left hand fingers were amputated due to improper handling of the die-casting machine. In addition to mental trauma, his salary has been reduced from Rs. 9000 (USD140) to Rs.6000 (USD90) per month. While he continues to send half of his salary back home, he will now always remain a helper with little scope for progress within the factory making him unable to meet the increasing costs of his family.



MAJOR CAUSES OF ACCIDENT

- Carelessness of co-workers.
- Irregular safety inspections and relaxation in safety- norms by the supervisors
- Absence of adequate training for workers.

IMPACT OF ACCIDENT

- Permanent loss of three fingers of left hand.
- Will not be able to work on machines.
- Will now be engaged in lighter work such as cleaning the dye.
- Reduced future earning potential.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer paid for the cost of the treatment, provided some additional financial support and an alternative job.

CONTRACTOR

The contractor's support was not required as the employer took on the whole responsibility of treatment

ESIC

He was given proper treatment by the hospital and is satisfied with it. The employer played a critical role in facilitating the process.

UNION

Did not approach union as the employer co-operated well.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #13

Birpal

19-year-old Birpal is from Etawah, Uttar Pradesh. While working on a die-casting machine, in a tier-3 factory that makes automotive locks and mirrors, he met with an accident. He was working in the night shift when he lost consciousness due to long working hours and fatigue and fractured fingers of his left hand. He had only recently started contributing to his family's income and due to this accident; the burden has again shifted to his father's shoulders.



MAJOR CAUSES OF ACCIDENT

- Fatigue and loss of consciousness due to unduly long continuous work.
- No training provided to the workers; he started operating the dye-casting machine on day one itself.

IMPACT OF ACCIDENT

- Fracture in 3 fingers of left hand
- Father is the now again the only one taking care of the family
- He is expected to lose a few months of earning
- An injury like this is likely to lower his motivation to work.
- Unaware how long it will take for his hand to heal and for him to be able to go back to work.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer is quite helpful and is providing support with the treatment. However, no financial assistance was given.

CONTRACTOR

The employer is quite helpful and is providing support with the treatment. However, no financial assistance was given.

ESIC

He is receiving treatment from a private hospital. He went to ESI for approval of leave (company requirement) but is experiencing a lot of delays at their end.

UNION

Never thought of contacting the union, as the employer has been very helpful.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #14

Collector

23 year old Collector is from Allahabad, Uttar Pradesh and works as a helper in a tier -2 factory, which makes forged and machine products for various automobile companies. He slipped on a wet floor as the wheel of a trolley he was pulling broke down and fractured his leg. Although, the doctor is not sure about his recovery period, he is hopeful of joining the factory again post his recovery.



MAJOR CAUSES OF ACCIDENT

- Packing department is neglected from a safety perspective.
- No safety inspection in the department even though the machining department has high standards of inspection.
- No safety gear has been provided to workers in packaging department.

IMPACT OF ACCIDENT

- Broken leg, with a large wound.
- Unable to work due to injury.
- Collector is expecting to be back to normal and return to his role.
- However, as observed in other cases there will always be some doubt about full recovery.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer is quite concerned about his injury and has also arranged for food at his home.

CONTRACTOR

The contractor helped him in getting the required treatment and has assured him that he will get his salary for leave.

ESIC

He is quite satisfied with the treatment administered by ESIC; he is well tended to by the doctors. Employer played a key role in facilitating the process.

UNION

Did not approach union, as the employer's attitude is fine.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESIC	Employability & Social Security
---------------------	-------------------	-----------------------	-----------------	---------------------------------

Case Study #15

Santosh Kumar

23-year-old Santosh Kumar from Mathura, Uttar Pradesh operated a welding machine in a tier -2 axle and oil tank manufacturing unit. Due to miscommunication and faulty functioning of sensor, his hand got stuck in the machine and the fingers of his left were severed in the middle. It took him three months to recover and start working again. However, he finds it difficult to operate machines and lift heavy goods after the accident.



MAJOR CAUSES OF ACCIDENT

- Sensors of the machine were not working properly.
- No preemptive safety inspection.
- Heavy rush while working in order to complete the work
- No formal training for the workers.
- No safety training for the workers.

IMPACT OF ACCIDENT

- All four fingers are severed midway
- Unable to grab heavy material and faces difficulty in operating machines.
- Couldn't work for three months and his brother had to take the extra burden.
- Limited avenues for work after the accident.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

Employer supported his treatment; someone from the factory always accompanied him to the hospital. No financial assistance was provided.

CONTRACTOR

The contractor gave him an ESIC card after the accident. He also assisted in the treatment.

ESIC

He is satisfied with his treatment although no orthopedic doctors were available when the accident happened. He is getting disability pension as well.

UNION

Did not approach the union

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESIC	Employability & Social Security
---------------------	-------------------	-----------------------	-----------------	---------------------------------

Case Study #16

Yashbir

36 years old Yashbir is a native of a small town in Dharuhera, Haryana. He operates a rotary milling machine in a top tier-1 two-wheeler manufacturing unit. While removing an incorrectly loaded component, he lost two fingers of his right hand. Post the accident, he is unable to work with full effectiveness and his hand hurts after few minutes of active work. Although his salary has not been reduced as of now, he is concerned that he has limited growth opportunities now and may experience a reduction in income.



MAJOR CAUSES OF ACCIDENT

- Loading of component in wrong way.
- Machine got stuck due to poor maintenance.

IMPACT OF ACCIDENT

- Lost two fingers of right hand.
- Unable to work for long hours.
- Unable to lift heavy weight

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

He was treated well by the employer as he was on the factory's payroll. The factory made him permanent after the accident.

CONTRACTOR

Not on contract so contractor had no role in this situation.

ESIC

Treatment was delayed by ESI. Not satisfied with his treatment as he thinks his fingers could have been saved. He experienced lack of cooperation by ESI staff.

UNION

The union assured him of his job.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #17

Dushrath

Dushrath did not allow use of his photograph.

23 year old Dushrath* is from Mathura, Uttar Pradesh. He operated a welding machine in a tier -2 axle and oil tank-manufacturing factory. The machine on which Dushrath was working had no sensor installed and the upper clamp was not working properly. When Dushrath informed the maintenance team about the same, they checked and repaired the machine and assured him that sensors have been fixed. However, immediately after re-starting the work, clamp fell down on his right hand severing his right thumb. He expects to recover and start working again in three months time and has started working as a helper in the same factory even though he has not recovered fully.

MAJOR CAUSES OF ACCIDENT

- False assurance that the sensor has been fixed.
- Untrained workforce.
- Inappropriate safety equipment.

IMPACT OF ACCIDENT

- Thumb of right hand chopped off.
- Income for past few months has come down due to unpaid leave.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

No salary for leave taken due to injury, so he has had to join back as helper even when the hand is bandaged.

CONTRACTOR

Contractor got the ESI card stamped so that it could be useful. He also dropped him to his home and reaches out to him constantly.

ESIC

ESI hospital is not treating Dushrath as they say that a valid authority has not stamped the ESI card.

UNION

Did not approach the union as the management ably supported him.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #18

Indrajeet

Indrajeet did not allow use of his photograph.

23-year-old Indrajeet* is from near Gorakhur, Uttar Pradesh. He operated a grinding machine in a tier -3 alloy wheel-manufacturing factory. Operating a faulty machine at work led to loss of the thumb of the left hand. He is unable to work now and his father alone has to bear the pressure of sustaining the family alone.

MAJOR CAUSES OF ACCIDENT

- Failure of brakes in the machine.
- Ignorance of maintenance team.
- Lack of safety gloves.

IMPACT OF ACCIDENT

- Left hand's thumb was severed.
- Unable to work for the past one month.
- Now, his father is the only one to run the household.
- He is worried about whether or not he will be able to work properly again.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer paid all the bills of his treatment in Gangaram hospital. But after that no financial assistance has been provided.

CONTRACTOR

He is not on contract and the contractor has no role in this case.

ESIC

He got his treatment done at a private hospital and then transferred to ESI. But, he is facing delays at ESI, as he does not have a permanent ESI card.

UNION

Did not approach union and the reason for the same is unknown.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #18

Manoj

Manoj did not allow use of his photograph.

25-year-old Manoj* is from BulandShahr, Uttar Pradesh. He operated a die-casting machine in tier-3 factory that manufactures break shoe for top players in the industry. His own negligence during machine maintenance led to multiple fractures and nerve damage on his right hand's fingers. He is not sure about the extent of permanent damage to his hand but seems to be confident of getting a job back in the same factory.

MAJOR CAUSES OF ACCIDENT

- Own negligence while working on the machine.
- Excessive pressure from the management to achieve the targets.

IMPACT OF ACCIDENT

- His right hand's fingers broke in 3 places and were severed, and one of his nerves got damaged.
- Unable to work while his hand is injured.
- He stays in a joint family therefore he can rely upon his father and two brothers.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer is concerned about the safety of workers and is helping Manoj with his treatment at a private hospital.

CONTRACTOR

Not on contract and thus contractor played no role in his accident.

ESIC

He went to ESI only for approval of leave, no issue faced.

UNION

Union was not contacted, as he is satisfied with the support provided by the employer.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

Case Study #20

Devender

Devender did not allow use of his photograph.

22-year-old Devender hails from a township near Rewari, Haryana. He operates an automated die-casting machine in a tier-2, injection molding and auto component factory. Lapse of concentration led to an accident and resulted in the fracture of his right hand's thumb. Post recovery, he has resumed his duties without any discomfort or problem.



MAJOR CAUSES OF ACCIDENT

- Collision of dye with another dye.
- His own carelessness/lapse of concentration.

IMPACT OF ACCIDENT

- Fractured right hand's thumb.
- No immediate financial effect on family as they have an alternative source of income.

RESPONSES OF THE STAKEHOLDERS

EMPLOYER

The employer is very cooperative and has supported him throughout the course of the treatment.

CONTRACTOR

The contractor guided him and the other workers on how to get a permanent ESI card.

ESIC

He did not have any ESI card. He took it only after he met with the accident. He is quite satisfied with the treatment given by ESI.

UNION

Did not approach the union as he is satisfied with the support of the employer.

PRE-ACCIDENT PARAMETERS

Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gear	Quality of gear	Work Pressure	ESI Card Pre-Accident
-----------------	-------------------	------------------	---------------------	----------------------	-----------------	---------------	-----------------------

POST-ACCIDENT PARAMETERS

Employer's Attitude	Worker's Attitude	Contractor's Attitude	Services @ ESI	Employability & Social Security
---------------------	-------------------	-----------------------	----------------	---------------------------------

*Devender did not allow use of his photograph.

Part 6

The Other Side: Understanding the Perspective of Doctors, Factory Supervisors/Owners & ESI Officials

Accidents in the Automobile Industry in Gurgaon: Case Studies and Stakeholder Response
A SafeInIndia - Agrasar Research

The Other Side: Understanding the Perspective of Doctors, Factory Supervisors/Owners & ESI Officials

In addition to the above case studies based on the interviews of injured workers, the research team also interviewed a number of other stakeholders to validate some of the claims made by workers. These included doctors at various healthcare institutions (public and private), the immediate supervisors of accidents workers and owners/heads of the tier 2/3 factories. Discussions focused on key challenges faced by the hospitals in dealing with accident victims, challenges faced by workers in availing the treatment and also the support provided by factories to the workers.

Researchers spent 15 days at one of three ESI Hospitals in Gurgaon, during which seven injured workers were observed while receiving treatment. The hospital records also confirmed that 15-20 such patients (new & follow up) visited various departments of the hospital every day for treatment during the period of research. One doctor at ESI said: **“We attend to at least 1-2 workplace accident patients everyday. However, in case of severe injuries and need for specialty referrals, the patients are referred to ESI empanelled private hospitals due to lack of latest technology and adequate infrastructure. Also, many of these patients suffer from accidents during night shifts and we, at times, do not have enough doctors to attend to patients during that time.”**

The doctors in the emergency wards also raised a concern: **“We get around 20 such cases in a day. While some of them are treatable cases with partial disabilities, some unfortunate patients suffer from permanent disabilities as well”**

Another ESI officials suggested that they interact with at least 2 -5 victims on a daily basis. **“Most of our discussions are either around pension, leave or to receive a new ESI card”**, he said. However, he refused to share any details about the challenges faced by them or the victims in availing the ESI benefits.

The private hospitals also suggested a significant inflow of workplace accident patients through either ESI referrals or direct outpatient or inpatient visits. In just one of the private hospitals in the area, albeit a large one, the orthopedic surgeon informed us that they get around 18-20 such accident cases every month. **The doctors highlighted that patients prefer private hospitals due to availability of doctors during evening and night hours, proximity to the factories and also faster turn-around time for treatment.** According to them, some of the patients complained of unsympathetic behavior by the staff at ESI hospitals. One of the doctors in a private hospital said: **“Cost is a major concern for these patients. While, some are supported by their employers initially, those who cannot sustain the treatment, revert to ESI hospitals for continuation.”**

Not all private hospitals provide treatment of the desired quality. The research team was made aware of incidents where certain comparatively lesser-known private hospitals were approached because they do not ask too many questions about the accident. Also, employers, who did not pay the required ESI insurance premiums and/or did not comply with the required ESI process for their staff, often preferred such private hospitals. This apparently saves time and money for employers, though it ultimately compromises the worker's ease of receiving follow-up treatment and monetary compensation from ESI when most needed. Some of these private hospitals

are not equipped for treating serious injuries and their poor treatment leaves the workers with long-term disabilities, which could have been avoided with the appropriate immediate, and follow-up treatment.

While most of the factory supervisors were not forthcoming during discussions, one of the floor supervisors in a tier -2 factory spoke up on condition of anonymity and confirmed the insights provided by workers: **“Trainings do happen, but they are only a formality. The trainings are not well-defined and often unstructured. Safety is dealt with superficially, and that too because its a requirement and is not taken seriously by the management.”**

Head of a tier-2 manufacturing unit, shared on condition of anonymity **“We all prefer to hire contractual workers and not permanent employees at the shop floor level. This is done at times to bypass the various labour laws that are onerous and bureaucratic. Also, the reluctance to pay the ESI premium is related to the ineffectiveness of the treatment and the limited support provided by the ESI to injured workers.”**

One manufacturer shared that some companies do extend medical insurance cover to the Contractual workforce and their families, including helpers. In some cases, the life insurance cover is around Rs. 5 lakhs. Another Tier 2 manufacturer stated that the process required to register workers with ESI is too cumbersome but that his unit has had very few accidents, so he takes care of any injured workers himself should that happen. The same manufacturer also welcomed the suggestion of better training and best practice material available for his supervisors from OEMs.

These stakeholders comments reinforced the insights provided by workers regarding the high frequency of such accidents, the ineffectiveness of ESI due to shortage/ attitude of hospital staff especially during night/early morning hours and the perceived complexity and burden of ESI process which is either too onerous or is being used as an excuse to not pay the ESI premium.

Lack of emphasis on safety training and quality safety gear in the tier 2 and tier 3 was confirmed from these interviews.



Part 7

Research Findings

Research Findings

The research findings have been divided into pre-accident and post accident factors as highlighted previously in the caselets. Across all the factors, the responses, roles and effectiveness of stakeholders and interventions have been graded as per the following color-coding:

Red Color: High negative effect, Yellow: Medium negative effect, Green: No effect, White: No Role in particular case. Each colour box has the relevant case number (1-20)

7.1 Pre-Accident: Common Factors Contributing to Accidents

Lack of training and safety awareness

"I have never received any formal training on running the machine or safety measures in any of the four companies that I have worked with." - Visheshwar

In 16 of the 20 cases, no training was provided to workers. There appears to be no effective culture and practice of safety training in most tier 2 and tier 3 factories. Workers mostly learn by observing fellow workers, working as helpers and often end up making the same mistakes as their seniors.

Absence of training in machine handling and safety played a critical role in most of the cases. In 30 per cent of the cases, lack of training resulted in poor adherence to safety norms by workers and an unfortunate lackadaisical attitude of workers towards the same. In companies where regular training takes place, the workforce is found to be more concerned about their own as well as co-workers' safety.

Safety Training	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
-----------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

Poor safety inspection & supervision

"There is no safety inspection or supervision done in the factory. If somebody is found flouting the safety norms he is simply ignored" - Sunil

The companies show a casual attitude when it comes to safety inspections on the shop floor. **In 8 of the 20 cases there was no defined process or mechanism for such inspections. In another 4, the inspections were irregular and ad-hoc.**

Inspections become even fewer during the night shifts, when in the absence of senior members of the team, the junior workers, who also lack experience, are on their own and without adequate supervision.

Some departments, like packaging are totally omitted from inspections, as they are perceived to be less accident-prone, even though this is not necessarily the case.

Safety Inspection	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
-------------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

Inadequate safety mechanisms in the machines

“There are no safety sensors in any of the manual machines. The supervisors and the management understand the problem but nobody does anything.” - Neeraj

No automatic safety control system was found in as many as 70 percent of the 20 cases. In many instances the safety mechanism is put into place only as an after-thought to a major accident. Even in cases where a safety system is present, these are not regularly checked and maintained. Delays in maintenance leave the machines prone to malfunction and the workers at risk. In some cases, serious accidents are caused when the departing shift/supervisors don't properly communicate the status of machines under maintenance to the new shift.



High fatigue due to insufficient rest/work breaks

“I was pressurized by my supervisor to increase production even when I was unwell. I lost control of the machine and lost two fingers” - Raja Shah

In 45 percent of the cases, fatigue due to high work pressure caused the accident. A worker usually cannot leave the machine until somebody replaces him in the next shift and the industry appears to have a dearth of skilled human resource. In some cases, the employers are found to be pressurizing workers, without the required empathy. The companies with efficient recruitment systems and therefore better availability of human resource appear to put less unfair pressure on workers. They have sufficient workers available for rotation in different shifts.



Lack of regular provision of safety gear

“The factory is not concerned about whether or not safety equipment is available. Safety is considered to be solely the workers' responsibility.” - Surrender

In 70 per cent of the cases, safety gear is not provided on time and not re-issued, if damaged, between shifts.

Absence of appropriate safety training also adds to the issue, as the workers lack understanding of safety measures and proper use of the gear for protection.



Ineffectual quality of safety gear

“The gloves are made of a simple cloth. In case of injuries, they are of no help. The gloves are seen as “hygiene tool” rather than safety equipment by the supervisors.” - Ashok

Companies seem to prioritize cost over safety. The safety gear provided is often sub-standard and does not meet the required specifications. Unconcerned about worker safety, many factories just want to tick-the-box of compliance and legal standards while providing gear at the lowest possible cost. It appeared to the team that **in not even a single case, adequate high quality safety equipment was provided.**

In many cases gloves are perceived to be useful for maintaining hygiene rather than as safety instrument. Therefore, the employer's source cheaply priced gloves, which are not capable of safeguarding against injury, trivial or severe.



Low safety consciousness among workers

“While working in a hurry, we often tend to show negligence of safety which may result in an accident.” - Manoj

In around 25 per cent of the cases, too casual a behavior by the workers themselves and their low safety consciousness added to the factors leading to accident.

There is also a direct correlation between the training provided by the factory and the attitude of workers towards following safe practices. If they are well trained they become more conscious of the possibilities and consequences of injuries and take sufficient precautions.

Culture in the factory also affects the behavior of an individual. Workers observe what the others are doing and tend to follow each other's example. For example in one case the victim began to follow the safety measures after realizing that it is the norm on the shop floor.



Young migrant workers are more accident-prone

“I was only 20 years old when I started working and gradually learned the work. But, then this accident happened”...Sunil

While the respondents age profile varied from 18 years to 52 years; **75 per cent of the accident victims were under 23 years of age.**

Absence of structured training during the initial years of joining the work force and limited experience in handling complex and powerful machinery results in higher incidences of accidents during the starting phase of their career (especially between 6 months to 2 years).

All the victims, except one, were migrants from the states of Bihar, Uttar Pradesh & Rajasthan.



Employee Insurance Coverage is not universal

In 13 of the 20 cases, ESI card was available with the accident victims. However, on further discussions it was found that only 40 per cent (8 out of 20) of the workers had ESI cards with them before the accident and the remaining 12 were exposed to risk of not being able to get the important ESI benefits. Although, finally, 75 per cent of them obtained temporary ESI cards, the process through which they got these, after the accident, is not clear.

According to the ESIC rule, although accident related benefits could be availed through the temporary ESIC card, other benefits like sickness benefit and maternity benefit cannot be availed with the temporary card. The colors below highlight the presence of cards before the accident (Green - Permanent, Yellow-Temporary, Red - No card)

Post accident, an additional 25 per cent of the victims got ESI cards either on their own or with the assistance of employer or contractor. **However, some of the workers found it difficult to get their temporary cards changed to permanent cards due to lack of knowledge of ESI processes. Also, one victim was refused ESI treatment on the basis that his card was no longer valid and not stamped by an authorized body.**

In 13 cases, the premium of the card was deducted from the salary of the workers. In factories where ESI card was not provided to the workers, the employers appeared to consider the ESI process inconvenient and time consuming. The workers also stated low concerns towards worker's safety by the employers as another reason.



Majority of the sufferers are contractual workers

Only 25 per cent of the workers (five of the 20) were permanent employees while remaining were contractual workers, which is broadly in line with the proportion of general worker population in Gurgaon.

“They simply said, you couldn’t be on company’s payroll. If you are not happy, you can change the job” said Rohit, narrating his meeting with the employer after the accident.

Yashbir, working as a permanent worker in a tier-1 factory, stated that there exists a clear disparity between permanent and contractual employees in the factory. Though the employer supported him, he shared that had he been on the contractor’s payroll, the factory would have asked him to leave after the accident.



7.2 Post-Accident¹⁴ : Support Available to Workers Post Accident

Half the employers did not provide the required support to the injured workers

“The employers made an error in preparing my leave reports which are required for ESI support. When I requested them to change the same, I was asked to leave the office.” - Raja Shah

In around half of the cases (in green below), the workers felt that employers provided prompt support and helped them monetarily as well as employed them back after the recovery. **However, in the other 50 per cent of cases, employers showed complete apathy, especially where the worker was easily replaceable.** The employers’ support and attitude also influenced the worker’s perception of effectiveness of the medical treatment in ESI hospitals. The workers who were helped by the employers found the ESI treatment to be of satisfactory level.



Contractors are mostly unhelpful

“The contractor always tells me to meet him after few days when I request him for compensation and pension support. I am not sure if he wants to help me” - Neeraj

In about half the cases, employers appear to take the responsibility of post accident care and in such cases; contractors have no contribution to the process. However, in the remaining 50 per cent of the cases where employers don’t help, workers need to rely on the contractors. But, only in **five of ten such instances did the contractors supported the victim in obtaining timely medical treatment and justified compensation from the factory as per institutional policies.**

In the figure below, “E” indicates the cases where employers have taken over the responsibility of care from the contractors.



Community Support

One positive factor in the lives of injured workers, post an accident, is the support they receive from the community. Fellow workers, migrant laborers from the same native places, friends and neighbors in the slums, provide community-based support to workers who suffer from accidents. Support in the form of monetary assistance, temporary shelter, food for family & self, and guidance on how to address the problem and receive compensation if feasible is also provided mostly by the community members.

¹⁴ Red Color: High effect, Yellow: Low effect, Green: No effect / Numbers (1-20): Case Study Numbers / E: Employer, N/A: Cases where contractor’s role is not applicable. / ESIC: Employee State Insurance Corporation

ESIC - Medical Care at ESI hospitals and other benefits for injured workers

Most workers were first treated at small private hospitals instead of ESI hospitals. The choice of hospital was influenced by convenience, previous experience of dealing with similar accidents, distance to the hospital and availability of doctors during evenings and night shifts at the concerned hospital; time-consuming ESI procedures and attitude of ESI hospital staff. However, almost all accident victims visited ESI hospitals either for post-operative follow-up as that is free of cost and/or for obtaining their disability allowance & pensions.

Lack of adherence to ESI process by the employers, ignorance of ESIC process among workers and absence of required guidance to workers immediately after the accident, emerged as the biggest problems regarding the effectiveness of ESIC.

Neither the workers nor the tier 2/3 employers/contractors seem to have clarity on ESI rules and regulations. While, 70per cent of the workers had received the first 90 days payment in lieu of injury, they still awaited access to regular pension (they should be eligible for if the process was followed properly). **Only 33 percent of the workers interviewed expressed satisfaction towards the support provided by ESI.** 13 of the 20 interviewed workers were unhappy with the treatment and cooperation provided by ESI.

Services @ ESI	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
----------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

Unions non-existent for contractual workers

Permanent workers are often part of formalized unions in tier 1 companies. However, across tiers, the contractual workers are neither part of unions nor do they have access to any services or support through the unions. **Not even a single victim who was interviewed as part of this study had approached the union.** Mostly the union does not exist in tier 2 and 3 companies as the employers always seem to discourage it. Even where small unions exist, the workers are not aware of them, as these unions are not always active. Moreover, the formal unions for permanent workers seldom extend their support towards contractual workers.

Unions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
--------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

Effect on workers - Decline in Employability & Social Security post-accident

Employability & Social Security	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---------------------------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

"After this accident, I am not sure if I will get a job anywhere. I am scared to work on that machine again" - Sunil

In all, except two cases the employability of the person has declined. With no dearth of able-bodied young migrant men flocking to Gurgaon in search of any type of employment, it is difficult for a worker with a (semi-permanently/permanently) disabled limb to find an alternative job. Their only recourse is mostly their current place of employment, where, unable to do regular roles due to their handicap, they are forced to work in "helper" roles. Re-employment in the same factory, albeit with a demotion and at a lower wage, perhaps out of compassion or perhaps to pre-empt legal action or social unrest was found to be common, with 10 out of 20 workers getting re-employed by their current employer.

These serious injuries appear to severely impact the psyche of these injured young men. In the absence of any counselling support to help them navigate the mental and physical trauma, they perceive their lives to be ruined and in some cases have become emotionally unstable and insecure.

Unsurprisingly, there appears to be a direct correlation between the severity of workers' injuries and the decline in financial security of their families. In many a cases the victim has been the single breadwinner, in others he has been supplementing the income of a growing family.

Injuries to them also meant greater burden on younger siblings in the families, who are then forced to drop out of school to migrate to the cities to work. Lack of education hinders their social mobility, keeping them in an unending cycle of poverty.



Part 8

ESI: Understanding the Void in Regulatory Environment

ESI: Understanding the Void in Regulatory Environment

In spite of having a good legal framework in the form of the ESI¹² Act for the protection of workers, India suffers from the chronic problem of lapses in implementation. Regulatory bodies, including the inspectorates, are often ill equipped and severely understaffed. The Comptroller and Auditor General of India (CAG) reported the following on performance of the Employees State Insurance Corporation in the year 2014¹³ :

1. Outstanding dues on account of contribution from establishments covered under the Act amounted to Rs. 1655.42 crore as of March 2013, of which Rs. 1001.82 crore is not recoverable.
2. Non-initiation of timely action to determine the dues has resulted in cases becoming time-barred and consequent loss of revenue amounting to Rs. 48.31 crore. Advances of Rs. 20.31 crore given to hospitals as of March 2013 were lying unadjusted in eight States.
3. Approximately 12000 ESIC employees had illegitimately availed medical benefits from ESIC dispensaries/hospitals without paying, though the facilities were meant for only insured persons paying contributions.
4. There were irregularities in the meetings of Standing Committee, Medical Benefit Council, Regional Boards and Hospital Development Committees. Regional Boards were not reconstituted in nine states though their tenure expired during 2004 to 2011.
5. Shortfalls in conducting surveys/inspections/test inspections led to ineffective coverage of the scheme.
6. Two Intensive Care Units (ICUs) and one Coronary Care Unit (CCU) at ESIC hospital, Noida, Uttar Pradesh are not functional after more than two years of the hospital being operational, as a result of which equipment worth Rs. 8.16 crore remained unutilized.
7. Due to non-availability of super specialty treatment (SST) in ESIC hospitals, the expenditure of ESIC on the SST from empanelled hospitals for its IPs increased significantly from Rs. 5.79 crore in 2008-09 to Rs. 334.54 crore in 2012-13.
8. Policy of sample testing for quality check of drugs procured by the ESIC was not being complied with, resulting in distribution of sub-standard drugs to insured persons posing serious health hazard.
9. Shortage of doctors and specialists ranged between 19 and 44 per cent across facilities had adverse impact on effective service delivery to insured persons.
10. While opening two 500-bed hospitals at Gulbarga and Mandi, the norms for presence of minimum number of insured persons were not followed and the locations were incorrectly selected.

It is apparent from the above report that though a robust law has been put in place, the State has failed to effectively implement its provisions fully. With outstanding dues to the tune of over a thousand crores, it is evident that the ESI Corporation has not proven

¹² ESI: Employee State Insurance

¹³ http://www.saiindia.gov.in/english/home/public/In%per cent20_Media/30of2014.pdf

to be an effective body to recover the arrears of contribution, interest and damages and has also not succeeded in ensuring prompt action against defaulters.

There are shortfalls in conducting surveys/inspections/tests and recruitment of doctors, a clear lack of adequate amenities and equipment at ESI designated facilities and large inefficiencies in monitoring the overall process.

The Act lays down provisions to promote measures to improve health and welfare of insured persons and establishes Medical Benefit Council to advise the Corporation on medical benefits, certification, etc. An important example is the need for the Medical Boards to ascertain the extent of disability of injured workers before submitting their report to the Corporation in order to grant compensation to the workers, however an injured worker has to wait for months before the Medical Board calls him for a check-up.

The lapses in implementation of the ESI Act are a very significant contributing factor to the dismal state of worker's health and wellbeing in India.



Part 9

Areas of Exploration For Possible Interventions

Accidents in the Automobile Industry in Gurgaon:
Case Studies and Stakeholder Response
A SafeInIndia - Agrasar Research

Areas of Exploration For Possible Interventions

The findings of the report indicate three broad areas of solutions:

1. **Prevention of accidents** through initiatives that improve safety consciousness among workers as well as manufacturers. For example, training for workers, an improvement in supply chain safety audit from OEM/Tier 1 manufacturers and sharing of best practices.
2. **Improvement in treatment and rehabilitation** of injured workers through initiatives that minimize the residual disability among accidental victims and help them adapt to their best possible future and reach their potential. For example, better immediate post-accident treatment, a more effective ESI process and a systemic process to identify appropriate roles for injured workers.
3. **Improvement in Government Policies and their Implementation** through advocacy and/or activism. For example, better implementation of labor laws and safety regulations, address shortage of safety inspectors and revision of antiquated laws. This however is not an immediate area of focus for the SafeInIndia team, which will instead target win-win pragmatic sustainable solutions with minimum political and activist agenda.

Indeed, there may be other areas where this situation needs corrective action and the SafeInIndia team will now discuss with a broader range of experts to understand that. However, based on current thinking, the team will focus on solutions in areas 1 and 2 above.

Way Forward

SafeInIndia's next steps would be to understand this detail, and prioritize solutions based on the following criteria:

1. Will they have an adequate & sustainable impact?
2. Are they win-win solutions for all stakeholders?
3. Are they scalable?
4. What kind of organization is better suited to implement the proposed solution? For example, NGO or a social enterprise and/or a public-private-partnership etc.
5. What are the possible timelines to implement the recommendations and the cost vs benefit for each of the recommendation?

Agrasar has identified a number of possible actions within the above that could be explored further in these two broad areas and that need to be evaluated with the experts:

9.1 Prevention of accidents:

9.1.1 Improve Safety-Awareness & Training of the workers and supervisors:

Innovative tools like videos, case studies, engagement games, role-plays and other such techniques can be used to create awareness & impart training. These initiatives will be far more effective if conducted at grass-root levels with full community participation, and indeed leadership.

- ◆ Improve safety awareness of supervisors through a better understanding of:
 - Safety systems and processes and their effective implementation.
 - Importance of safety practices.
 - Safety rules & regulations.
 - Impact of safety on worker's motivation and productivity.
 - Importance of rest/breaks during work.

- ◆ Improve safety-awareness & training of workers through a better understanding of:
 - Safety consciousness especially among the young inexperienced immigrant workers.
 - Operating instructions & associated risks with different kind of machines.
 - Judicious use of safety equipment & gear.
 - Protocols for speedy support & action post accident.

9.1.2 Improve Awareness & Training of the management & contractors in areas of:

- ◆ Business advantages of better global/local best safety practices.
- ◆ Current safety systems and processes including safety reviews, supervisor and worker training. For example, better management of accidents and effective & prompt interventions post-accident.
- ◆ Integration of Safety technologies in the existing process and their viability.
- ◆ Awareness of contractors towards safety regulations and guidelines.

9.1.3 Improve safety-performance in OEM end to end supply chain

- ◆ By working with OEMs and Tier 1 sub-contractors to conduct more stringent due diligence on the safety compliance of Tier 2 and Tier 3 suppliers linked to their supply chain and build capacity for increased audits and inspections.

9.1.4 Strength the role of civil society through:

- ◆ Assisting migrant workers to participate in local governance.
- ◆ Ensuring better representation by worker organizations.
- ◆ Raising awareness among customers to buy products from supply chains that care for safety of workers.

9.2 Treatment and Rehabilitation of workers

9.2.1 Improving the ESI process through:

- ◆ Timely enrolment of workers under ESI.
- ◆ Increased awareness of ESI process and entitlement pre and post-accident for workers.
- ◆ Advocacy of appropriate changes in rules and regulations, and effective implementation.
- ◆ Support for injured workers to obtain all applicable entitlements.

9.2.2 Rehabilitation of the injured workers

Injury should not be the end of an individual's working life or employability. We can take action in several areas including but not limited to:

- ◆ Post-accident psychological/trauma counseling.

- ◆ Provide career counseling and connections with businesses with disability-friendly HR practices.
- ◆ Training for potential career options including placement & post-placement support.
- ◆ Development & integration of low cost healthcare service delivery for occupational accidents.

SafeInIndia will focus on pragmatic win-win solutions that can be implemented quicker. Changes in government policies, though desirable and necessary, are a long-term goal.



Part 10

Limitations of the Study

Part 11

Scope for Further Research

Accidents in the Automobile Industry in Gurgaon:
Case Studies and Stakeholder Response
A SafeInIndia - Agrasar Research

Limitations of the Study

While the research team was able to interact with many workers and understand their perspective in detail, the study faced the following limitations:

1. Limited interviews of management/supervisors from the factories and contractors.
2. Limited access to and response from doctors regarding accident victims especially to assess the quality of care the injured workers received and the impact of such quality on long term hadicaps.
3. Some aspects such as legal options available to the workers, importance and role of unions, access to citizen rights were outside the scope and pur view of the current study and have not been covered in detail.

Scope for Further Research

The current qualitative research focused on stories of 20 accidental victims from the automobile industry to understand the causes associated with their accidents and the impact on their personal and professional lives. Based on the research findings and limitations, there exists scope to undertake further studies to understand the following in greater detail:

1. The legal issues associated with these accidents including the challenges faced by workers in reaching out to the judiciary and obtaining fair judgements.
2. Role and involvement of unions in accident cases especially in tier 2 and tier 3 factories
3. The ESI implementation process and strategies to ensure better compliance from factories
4. Research on various post-disability employability skills and job opportunities
5. Understanding the role of community support for accident victims.
6. Understand and leverage the best safety practices from other industries both in India & Globally



Part 12

Appendix 1 - Sampling Strategy

Accidents in the Automobile Industry in Gurgaon:
Case Studies and Stakeholder Response
A SafeInIndia - Agrasar Research

Appendix 1 - Sampling Strategy

Selection of subjects / Sampling Strategy

In general, qualitative research approach follows a 'purposive sampling' method. If the process is followed appropriately, the findings from such a sampling approach stand the objectivity, reliability and validity tests like any other research methodology.

The focus of the research was on case study analysis - why particular people feel in a particular way, the processes by which these attitudes are constructed and the role they play in dynamic processes within the system. Case study analysis is not just about why people feel in a certain way. Its purpose is to find out what all happens, in all its aspects, on the ground. The research generated different categories of trajectories that life of a worker has before, at the time of, and after the industrial accident.

Therefore, a two-pronged purposive sampling approach, as described below, was considered for this study.

Criterion Sampling - Intensity Sampling

Criterion Sampling

This involves searching for 20 cases or individuals who meet certain criteria:

1. Recently met with an accident and have undergone the whole cycle so as to have a comprehensive understanding as per the key research questions, AND
2. Have suffered a physical trauma injury (primarily crush injuries) in an auto mobile manufacturing plant in Gurgaon.

Intensity sampling

A sample consisting of information-rich cases that manifest the phenomenon of 'Trauma Accidents in Automobile manufacturing sector' intensely was considered. The logic and power of this sampling strategy lies in selecting information-rich cases for in depth study. Information-rich cases are those from which one can learn a great deal about issues of critical importance to the purpose of the research. To understand the different phases of the phenomenon the cases were divided roughly equally in the following categories:

- Old cases where all matters are closed and nothing remains pending for action.
- Cases that are in process with issues pending unresolved
- Newer cases that have just happened (and where possible follow them through the end)

Some exploratory work to determine the nature of the variation in the circumstances of accidents and work profile of workers under study was done. Experts from the automotive manufacturing sector were involved throughout the period of research to choose the sample more accurately.

Interviews

Detailed interviews were conducted with the identified cases. A semi-structured approach was followed for a discussion on the points listed below. The research team tried to do this in a disguised form so as to enhance the reliability of data. The cases were followed up regularly and frequently, depending on workers' visit to the hospital and seriousness of accident. In cases where workers were confined to home, visits were made to their houses to get reliable and valid information.

Major factors for understanding a case are -

1. Background of the worker including:
 - a. Socio-economic status
 - b. Choice of Occupation
2. Attitude of the Management towards Safety and Precautionary Actions taken including:
 - a. Communication of security concerns to the workers
 - b. Training of worker on proper handling of machines and use of safety gear
 - c. Pre-emptive safety inspections by the factory management
 - d. Disciplinary Action in case of deviance by the workers
 - e. Loss and damages norms - Regular availability of Safety Gear (one of the concerns highlighted by factory supervisors is delay in issuance of safety equipment)
 - f. On-ground challenges to access the benefits under ESI scheme
 - g. Possible legal measures for tightening adherence to registration under ESI
3. Cause(s) of Accident including:
 - a. Nature of Accident and correlation with the industry structure and supply chain (as defined earlier)
 - b. Worker's and supervisor's attitude towards safety
 - c. Conflict between production process and safety - Seasonality, Work Pressure, Productivity, etc.
 - d. Relationship between cost, training, rotation of workers, effect on productivity and safety.
 - e. Occurrence of similar Incidences - Regularity, High risk Roles
4. Response (of various stakeholders) to the Accident including:
 - a. Availability of First-Aid after the accident
 - b. Choice made by the victim - ESI hospital or any other hospital
 - c. Response of the Principal Employer (Respondent's perceptions as well as facts will be noted)
 - d. Response of the Labor Contractor (Majority of the workforce is on the rolls of contractors/manpower agencies)
 - e. Response of the ESI and other hospital Authorities
5. Effect of the Accident and Future of the respondent including:
 - a. Effect on the employability of the respondent
 - b. Effect on the family
 - c. Willingness to move back to same job
 - d. Alternatives available to the worker

Analysis of case studies

The team that conducted the site visits analyzed the qualitative data from each case study thematically. After all interviews and focus groups were transcribed, researchers reviewed the transcripts to ensure accuracy. Interview and focus group guides were used to facilitate data coding, ensure coding consistency across case studies, and produce comparable individual case study reports. Such an approach to qualitative data analysis helped us ensure that similar data are abstracted for each case study, which is important for synthesizing information across all case studies and illustrating the main study findings. Explanatory typologies were constructed for each case and a cross-case comparison was done to establish a relationship among various factors so as to have a holistic understand of the phenomenon and also to identify trends and typical responses. The analysis has been conducted by systematically organizing the data (narratives and words) into hierarchical relationships and metrics.

Governance Structure

A system of regular internal checks and reviews was established to ascertain the reliability on findings of the research.

Internal Checks

- The Project Lead took regular updates from the field researchers and course corrected wherever required.
- The Project Lead chose 3 cases (selected randomly) and assessed the information obtained by the field researchers.
- The Project Advisor reviewed 3 case studies and provided inputs on the structure and comprehensiveness of information.

Reviews by the forum

- Agrasar presented findings, at least fortnightly, to the team SafeInIndia and further course of action was modified wherever needed.
- A mid-term comprehensive review was done, for any course-correction
- Team SafeInIndia also conducted a field visit and an interim audit.



Part 13

Appendix 2 - Approximate estimation of Incidence of Accidents

Part 14

Appendix 3 - Summary of Pre-accident influencers

Part 15

Appendix 4: Summary of Post-accident influencers

Appendix 2 – Approximate Estimation of Incidence of Accidents

Assuming, total number of crush injury cases in Gurgaon in 2014-15 = X
 Number of such cases dealt with by the ESI hospitals = A
 Percentage of workers covered under ESI = P
 Therefore, X = A/P

Finding 'A'

As per the records obtained from ESI, Manesar, total number of crush injury cases = 107
 Number of ESI hospitals in Gurgaon = 4 (each catering to different geographic locations. Automobile manufacturing industry is dominant in all 4 regions)
 Therefore, number of such cases in Gurgaon in 2014-15 = 4 x 107 = 428
 A = 400 (approx.)

Finding 'P'

- Workers in formal sector that are covered under ESI = 48 per cent (As per the STANDARD NOTE ON EMPLOYEES' STATE INSURANCE SCHEME, ESIC, 2011)
- Workers in the informal sector in automotive sector in Gurgaon that are covered under ESI = 25 per cent (by conservative estimates- this is established on the basis of NSDC Report on Skill Gap, which says "In auto component manufacturing companies, a majority of the workforce is employed in tier-III and raw material manufacturing companies.")

AND Anecdotal research studies conducted by 'Gurgaon Workers News' and 'Faridabad Mazdoor Samachar' - <https://gurgaonworkersnews.wordpress.com>.

- Tier 2 - Of the 600 workers hired through contractors around 250 get neither ESI nor PF, although they work at JCB since two, three years.
- Tier 2 - Indo Autotech Worker (Plot 132 - 133, Sector 8, IMT Manesar) There are 50 permanent workers and 750 workers hired through two different contractors, manufacturing parts for Honda two-wheelers. Out of 750 contract workers 250 workers have got no ESI or PF.
- Tier 3 - Everfine Plastic Worker (Plot 283, Sector 6, IMT Manesar) The 55 casual workers are paid 3,500 Rs per month, No ESI No PF.
- Tier 3 - Tasha Automotive Worker (Plot 109, Sector 3, IMT Manesar) Around 100 workers work on two 12 hours shifts manufacturing parts for Sono Steering, which is another automobile supplier. None of the workers has ESI and PF." - There are more such anecdotal evidences.

Therefore number of workers covered under ESI in automobile sector = (.9*.25 + .1*.48) = 27 per cent (Assuming 90per cent of the industries in the informal sector)

Therefore P = .27

Therefore, total number of crush injury accidents in Gurgaon in 2014-15 = 400/.27 = **1480** (Approx.)

Appendix 3 - Summary of Pre-Accident Influencers

	Pre-Accident																			
Safety Training	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Safety Inspection	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Safety Mechanism	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Machine Maintenance	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Availability of Gear	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Quality of Gear	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Work Pressure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Permanent vs Contractual	C	C	P	C	C	P	C	C	C	C	C	C	C	C	C	P	C	P	P	C

Appendix 4 - Summary of Post-Accident Influencers

	Post-Accident																			
Employers Attitude	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Workers Attitude	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Contractor's Attitude	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Services @ ESI		(E)	(N/A)			(E)			(E)		(E)	(E)	(E)	(E)	(E)		(N/A)	(N/A)	(E)	
Employability & Social Security	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Age of Worker (in Years)	20	27	23	20	20	18	23	52	19	23	35	21	19	23	22	36	23	23	25	23



Part 16

Appendix 5: Individual Profiling Across Accidental Parameters

Part 17

Appendix 6: Leading Automobile Manufacturing Industries in Gurgaon

Part 18

Appendix 7: Details of Experience With ESI Services for All The Accident Workers

Accidents in the Automobile Industry in Gurgaon:
Case Studies and Stakeholder Response
A Safelnindia - Agrasar Research

Appendix 5 - Individual Profiling Across Accidental Parameters

Names		Pre-Accident Parameters							Post-Accident Parameters						
		Safety Training	Safety Inspection	Safety Mechanism	Machine Maintenance	Availability of Gears	Quality of Gear	Work Pressure	ESI Card:Pre Accident	Employers Attitude	Workers Attitude	Contractor's Attitude	Services @ ESI	Employability & Social security	
Case Study #1 - Neeraj	20														
Case Study #2 - Om Kumar	27											E			
Case Study #3 - Ravi Chaudhary	23											N/A			
Case Study #4 - Sunil	20														
Case Study #5 - Surender	20														
Case Study #6 - Suraj	18											E			
Case Study #7 - Raja Shah	23														
Case Study #8 - Visheshwar Ray	52														
Case Study #9 - Pradeep	19											E			
Case Study #10 - Rohit	23														
Case Study #11 - Ravinder	35											E			
Case Study #12 - Ashok Kumar	21											E			
Case Study #13 - Birpal	19											E			
Case Study #14 - Callector	23											E			
Case Study #15 - Santosh Kumar	22											E			
Case Study #16 - Yashbir	36											E			
Case Study #17 - Dushrath	23														
Case Study #18 - Indrajeet	23											N/A			
Case Study #19 - Manoj	25											N/A			
Case Study #20 - Devender	23											E			
			High negative effect on a particular case												
			Medium negative effect on a particular case												
			No effect on a particular case												

Appendix 6: Leading Automobile Manufacturing Industries in Gurgaon

Hero Moto-Corps:

Hero MotoCorp, with annual turnover of Rs. 27585.30 crore (USD 4.16 bn), is one of the largest two wheelers manufacturer in the world and has 4 globally benchmarked manufacturing facilities. Two of these are based at Gurgaon and Dharuhera, which are located in the state of Haryana in northern India. The third and the latest manufacturing plant is based at Haridwar, in the hill state of Uttarakhand. The company posted its highest ever-annual domestic sales of 189,062 units during FY 2014-15 recording 41 per cent growth over last financial year.

Maruti Suzuki:

Maruti Suzuki, the largest car manufacturer in India, alone made 1.5 million units during the year, a growth of 11.9 per cent over the previous year. Of this, exports were at 121,713 units, a gain of 20.1 per cent. They registered Net Sales (net of excise) of Rs. 486 bn (USD 70 bn), a gain of 14 per cent over the previous year. Net Profit during the year stood at Rs 37,112 million (USD 0.6bn) a gain of 33.4 per cent compared to 2013-14.

Honda:

Honda, the world's largest manufacturer of two Wheelers, arrived in India as Honda Motorcycle and Scooter India Pvt. Ltd. (HMSI), a 100per cent subsidiary of Honda Motor Company Ltd., Japan in 1999. Since its establishment in 1999 at Manesar, District Gurgaon, Honda has continued to manufacture & provide quality at reasonable prices. Despite being one of the youngest players in the Indian two-wheelers market, Honda has become the second largest two-wheelers company in India. The company sold record 66,31,826 units of two-wheelers during the financial year (April 1, 2014–March 31, 2015) - a growth of 6.2 per cent.

Appendix 7: Details of experience with ESI services for all the accident workers

Names	ESI Card	Type of ESI Card	Before Accident	After Accident	Did you go straight to ESI hospital?	Why did you not go to ESI hospital?	How was the Rx at private/ESI hospital	Did you go to ESI again?
Case Study # 1 - Neeraj	Yes	Permanent	Permanent	Permanent	Yes. There was no first-aid at the factory	NA	ESI - long waiting periods	For follow up & further Rx
Case Study # 2 - Om Kumar	Yes	Temporary	Temporary	Temporary	Yes, but referred to a private hospital after primary treatment	NA	At the private hospital, initial problems due to only 2 days of medical approval; overall Rx was Good, proper dressing and timely checkups and followup by doctors	Yes for medicine & further dressing
Case Study # 3 - Ravi Chaudhary	Yes	Permanent	No	Permanent	Yes, But no doctors available @ 7:30 am, taken to private hospital (one refused; then taken to another)	NA	PVT - Good, proper followup by docs, but costly	For follow up Rx but experience was bad, referred to small private hospital on request
Case Study # 4 - Sunil	Yes	Permanent	No	Permanent	Private but no medical aid provided, then taken to ESI. Later went to another government hospital for surgery on his own	ESI doctors only did symptomatic Rx with no improvement in condition	Unsatisfied with ESI treatment but Government hospital was good	No, back to village
Case Study # 5 - Suren der	Yes	Temporary	Temporary	Temporary	No, private hospital	Decision of Contractor	PVT - Proper Rx was provided, Cost was a constraint	Yes, for follow up, but condition has deteriorated and doctors have asked him to visit the private hospital where surgery was done
Case Study # 6 - Suraj	No	No	No	No	No, private hospital	NO ESI Card	PVT - Happy with the Rx provided	No, continuing @ Private hospital
Case Study # 7 - Raja Shah	Yes	Temporary	No	Permanent	No, private hospital	NO ESI Card	PVT- Good	After 3 days transferred to ESI, No improvement in health by ESI treatment, so back to village and continue treatment there
Case Study # 8 - Vishes hwar Ray	Yes	Permanent	Permanent	Permanent	No, private hospital, then ESI but finally referred to a large private hospital due to seriousness of the injury	Proximity to the private hospital, Then ESI, Then Private - Severity of injury	PVT -Good	Yes, after getting 10 days treatment transferred to ESI. It's worse they did not take care of me or said "ye thik ni hoga aur ab ase hi rhega"*(it will never be the same again)

(Continued...)

Nam es	ES I Card	Type of ESI Card	Befo re Accident	Afte r Accident	Did you go straight to ESI hospital?	Why did you not go to ESI hospital?	How was the Rx at private/ESI hospital	Did you go to ESI again?
Case Study # 9 - Pradeep	No	No	No	No	No, private hospital	Injury Severe so taken directly to private hospital	PVT - Not happy with the Rx provided at the small private hospital, but the large private hospital was good	Only for leave approval and other benefits
Case Study # 10- Rohit	No	No	No	No	Yes	NA	PVT - Happy with the Rx provided	For dressing & follow up
Case Study # 11 - Ravinder	No	No	No	No	Yes	NA	ESI - Not totally satisfied with ESI as physiotherapy is not available	Rx is ongoing, but no provision for physiotherapy
Case Study # 12 - Ashok Kumar	Yes	Temporary	Temporary	Temporary	No, private hospital	Accident happened on Saturday, doctors available for a short time in ESI hospital	PVT - Good	Yes, after initial Rx for continuation of Rx; Experience was worse (they are careless, did not give proper treatment and no proper follow ups are there, "Laparvai bratte han, hath theda jod dete hnn")
Case Study # 13 - Birpal	No	No	No	No	No	Late night 2:30 am	PVT - Good Rx and support	No did not go to ESI at all
Case Study # 14 - Callector	No	No	No	No	No, private hospital	Proximity to the private hospital, Afterwards to ESI	PVT+ESI - Good Rx both @ Private and ESI hospital	Follow up @ ESI Hopsital for dressings
Case Study # 15 - Santos h Kumar	Yes	Temporary	Temporary	Temporary	No, private hospital	Proximity to the private hospital, Afterwards to ESI	PVT+ESI - Good Rx both @ Private and ESI hospital	Yes for further Rx
Case Study # 16 - Yashbir	No	No	No	No	Yes		PVT - No happy with the Rx and the time taken	Treatment @ ESI only
Case Study # 17 - Dushrath	Yes	Temporary	Temporary	Temporary	No, private hospital	Proximity to the hospital	No response	yes, for further Rx but refused due to invalid card
Case Study # 18 - Indraj eet	Yes	Temporary	Temporary	Temporary	No, private hospital	Temporary Card - Difficulty in getting Rx @ ESI	PVT - Good but costly @ private hospitals	ESI Rx is difficult to get due to temporary ESI card
Case Study # 19 - Manoj	No	No	No	Temporary	No, private hospital	ESI Process is time consuming	PVT - Good Rx at private hospital	Only for leave approval and other benefits
Case Study # 20 - Deven der	No	No	No	Temporary	No	No ESI Card	PVT+ESI - Satisfied with Rx at Private and Esi hospital	Visits ESI for change of dressing



Part 19

Appendix 8 : Detailed Case Studies

Accidents in the Automobile Industry in Gurgaon: Case Studies and Stakeholder Response
A SafeInIndia - Agrasar Research

Appendix 8: Detailed Case Studies

19.1 Case Study # 1 – Neeraj

Background

Neeraj is 20 year old and originally belongs to Kannauj, Uttar Pradesh. He studied till class 10th and then migrated to Gurgaon in 2013 along with his father. Neeraj is the eldest of all the siblings; he and his father are the only earning members in the family of six. All his younger siblings are studying and are simultaneously engaged in farming. Prior to the current job, Neeraj worked for a factory where his father is currently employed. However, Neeraj was asked to resign because he took leave for three days. In his present factory, he has been working since past five months.

Training

The workers operate the machine without any formal training. Neeraj was not given any training in the previous factory as well. When Neeraj joined his current job, he again worked as a helper first and then later as a machine operator.

The workers are not given any training on safety measures either. The supervisor has never told Neeraj anything about the safety measures. Those who have learnt in their previous factory are aware of the safety measures whereas those who haven't either learn from their co-workers or remain completely unaware of safety procedures and protocols.

Safety Measures

All the machines in the factory are manual whereas in his previous factory, all the machines were automatic. There are no safety sensors in any of the machines. Gloves, that the workers are supposed to wear while working on the machines, are easily and timely available to them. However, as found in most of the other cases, the gloves are not appropriate for preventing injuries.

Neeraj shared that the supervisors and the maintenance team are present but are neither concerned nor proactive towards adherence to safety measures. They just come, take a round and go, or sit completely idle. They never check the machine. They are not at all concerned whether or not the workers are following the safety practices specified by the factory.

Workers' Attitude and Work Pressure

Workers are asked to wear shoes in the factory but they generally come in slippers. Every once in a while the guard inspects them and asks them to wear shoes from the next day. But, there are very few people who wear shoes in the factory. Few workers are aware of the safety rules & follow them but others do not.

The shift in the factory is for 12 hours. The supervisors put pressure on workers to complete the work faster. They do not allow breaks / free time during work hours. Neeraj says, "We cannot even take a single break for tea in between the work. The supervisor just wants the work to be completed as fast as it can be."

The Accident

Neeraj was working on the power press machine, when a small unit got stuck in the machine. While trying to remove the stuck unit, he lost all the fingers of his left hand. The machine had no sensor to avoid the accident.

Medical Treatment

After the accident, Neeraj was not provided any first-aid in the factory, as it was unavailable there. A cloth was wrapped around his hand and he was taken to the nearest ESI hospital. The accident happened at around 10.30 am in the morning, therefore the doctors at ESI were available and they treated his hand. With loss of his fingers, he has been permanently disabled. His treatment is still ongoing and it will take around one and a half months for his hand to heal. He has to visit the ESI hospital regularly for the dressing of his hand. Neeraj is struggling with his treatment. He says that the hospital is flooded with patients and thus he neither expects nor receives timely treatment.

Frequency of Accident

It has just been five months since he has joined and within this short period of time two severe accidents have happened in the factory. In addition, other less severe injuries are quite common and they keep happening every now and then.

Response of Employer

The manager of the factory accompanied him to the ESI hospital when the accident happened. After that, the manager did not even ask him about his injury and treatment. He tried approaching the employer but the guards stopped him at the gate itself, saying that workers were not allowed inside the office premises. He has therefore not been able to meet his employer even once after the accident.

Neeraj has requested that he should be placed on the payrolls of the company and given a compensation and pension. So far, his efforts have been fruitless. The manager just says that everything will be done only after his hand heals. Neeraj thinks that they do not take him seriously. The contractor has given him Rs. 3700 (USD 61) as per the number of days he worked in April 15. He asked the contractor also to make him permanent on the factory's roll; provide him pension and compensation. The contractor has also not responded to his request yet. "The contractor always tells me to meet him after few days and doesn't address any of my concerns. I am not sure if he wants to help me," said Neeraj.

Impact and Way forward

All the fingers of his left hand have been severed in the accident. He has not even told his family about the accident, as he does not want them to be worried. Only his father knows about it. It appears that he will face challenges in his work and productivity will also be affected. At most, he can work as a helper throughout his career now.

Neeraj is eldest of all the siblings; he and his father are the only ones running his family. After the accident the burden of the entire family is now on his father and they are struggling to meet their living expenses. He does not even know how much time it will take for him to be able to join the work again. He has lost his fingers, which he can't get back now. But, he wants the job security, compensation and pension to be given to him so that he does not face issues in running his family. Though, so far his voice has not been heard by anyone. He has filed a case in labor court against them. The advocate has taken Rs. 1300 (USD 21) but has not said anything about the hearing yet. He has high expectations from the justice system but doesn't know when his case will be heard or what it will cost.

19.2 Case Study # 2 – Om Kumar

Background

27 years old, Om Kumar is an ambitious young man who doesn't just want to earn to survive, but actually wants to build and sustain a respectable career. In order to get a higher paying job, Om completed a die-manufacturing course a few years ago and moved to Gurgaon in search of work.

"I did this course thinking it is a good course for this line. After getting experience in and knowledge of this field, one can become a designer as well, one can then design it (die)."

He originally belongs to the Aligarh district of Uttar Pradesh. Due to grim conditions at home, he had to start working while he was studying. He used to work as a part-time laborer after school.

Training

There is no formal training provided at his factory. When somebody joins, he is told about the machine and guided while working on it for first 2-3 days. The co-workers help them understand the functioning of the machine. When Om first joined, no training was provided but the course of die maintenance helped him better perform the tasks assigned to him.

Safety Measures

There were no safety sensors in the machines. It was only after Om Kumar's accidents that sensors were incorporated into the machine. However, the sensors were installed in some of the machines only and even those stopped working a while ago. Everybody in the factory knows about the problem but they are too afraid to inform the authorities. There is no initiative taken by the factory create awareness among the workers about safety measures. Only charts / posters explaining safety measures have been displayed in the factory but those who cannot read remain unaware about the hazards of manufacturing work.

Om Kumar shared that compared to other factories; very few safety measures are followed in this factory. Workers are asked to wear any kind of shoes and gloves, which are not safe enough for the work they perform. Also, the factory does not provide safety shoes and the workers have to arrange them on their own. In order to save money, they end up getting canvas shoes, which are not meant, for hard use.

He says, "We do not have helmets. I have worked at different places; nobody is allowed to move onto the shop floor without a helmet. But in this factory we do not wear head-gear. I also bought these shoes. Many people wear canvas shoes."

Workers' Attitude and Work Pressure

The workers attitude towards safety is often that of ignorance and carelessness. Some of them follow safety measures whereas most simply ignore them. Though the factory conducts inspections and those found not conforming to the rules are reprimanded, workers continue to be unconcerned.

There is no undue pressure as such but workers are given targets and at times they have to work extra hours to complete urgent work.

"They sometimes say that this work is urgent so go after completing it. But they

never pressurize us to do it faster. Supervisors do set targets. But it is up to us how we achieve them. We have to keep ourselves safe and complete the work as well."

The Accident

While working on a press shop, Om met with an accident. He was repairing the die and while, his hand was still inside the machine, his foot went on the paddle and the machine started, leading to amputation of Om Kumar's hand.

Treatment

For his treatment, he was referred to a local hospital by the ESI. The hospital authorities wanted to discharge him without giving him the complete treatment. He had to insist that they provide the requisite treatment before discharging him from the hospital.

"I was referred to a local hospital from the ESI. I had 2 days approval for in-patient treatment, after that I was discharged. I was not even able to move and speak. I said where would I go like this? I need complete treatment. Then my factory provided me with the treatment in the hospital."

Frequency of Accident

The frequency of such accidents is very high in the sector. But so far, in this factory Om Kumar's case is the only serious one that has been recorded in his factory. Less severe accidents occur at a rate of 2-3 accidents/month. The minor injuries include small cuts to the fingers through iron tools.

Response of Employer

The people from his factory were with him when the accident happened. They helped him get the treatment at the hospital. The hospital authorities were about to discharge him without giving him the medical attention he needed; the factory had to intervene. His factory was quite cooperative in accommodating him. He was transferred to the store where he was assigned to work on the computer. He was not asked to operate the machine. He had already done a computer course that helped him learn quickly and acclimatize to the new environment.

When the accident had happened, they were talking about compensating for his injury but so far nothing like that have happened.

Impact

Om has lost his one hand in the accident. Though he has been transferred into the store and has to perform less stressful tasks, he still has some trouble because he is able to work only with one hand. His productivity has reduced drastically. Om now does not have any hope of progressing to even being a machine operator; leave alone his dream to be a manager in the factory.

He has not thought about changing his job because he is not sure whether or not any other factory will be willing to hire him. With no other regular source of income except a bit that comes from agriculture and his brother's newly set up mechanic shop, the family is struggling to meet their expenses and worried about the future.

19.3 Case Study # 3 – Ravi Chaudhary

Background

23-year-old Ravi belongs to Aligarh. After his father's death, he had to abandon his education post grade 7. The responsibility of family, which consists of his mother, sister and 2 brothers, fell on him and his two elder brothers who now live separately. He started working as an electrician in his village and could earn Rs. 400 (USD 6) a day. However, his income was irregular - at times he was able to earn Rs. 10000 (USD 170) in a particular month but sometimes was unable to make it to even Rs. 4000 (USD 67). With aspirations of getting a high and fixed salary, he moved to Gurgaon and started working for his current factory. He wanted to earn more money and save it for his sister's wedding.

Training

There is no training given in his factory. When somebody joins, he is asked to work as a helper and after getting familiar with the machine, operate the machine with the help of co-workers. Ravi also started operating the machine without any training; he worked for 4 days and on the 5th day the accident occurred.

Safety Measures

The machines have sensors. In the beginning itself he was told about security concerns and potential risks. He was told that the machine has a sensor and closes when contacted with iron. They are not supposed to wear anything made of iron; not even a ring. They are also told that if any problem occurs in the machine the first thing that one needs to do is turn off the main switch. Ravi says "I was not wearing anything made of iron on the day of the accident and the machine closed down on its own. I didn't even get time to turn off the main switch."

For the last two months the factory has been operating without a supervisor. To protect themselves, the workers are supposed to wear gloves but these are not made available on time. When they ask the management to provide the same, the management simply refuses saying the factory is already in too much debt.

Workers' Attitude and Work Pressure

Ravi shared that the workers are very careful and follow all the safety norms. The work pressure is more during peak season i.e. from November till March. If an employee goes on leave, another has to work a double shift to complete the targets. Ravi looks after the stock now as he can't work on the machine with one hand but when there is more work even he is asked to operate the machine.

The Accident

On his fifth day at job, there was an unexpected problem with the machine and it closed down on its own. Before he could switch off the machine supply, Ravi's hand got caught in the machine and he lost four fingers and part of his left palm.

Treatment

The accident happened at 7 am in the morning. Ravi was taken to the ESI hospital but there was no doctor available. His boss took him to a private hospital in Manesar where they denied him treatment. He was then brought to a private hospital in Gurgaon. They cleaned the wound and bandaged it but quoted whopping 5 lakh (USD 8300) rupees for treatment. Ravi was once again moved to a smaller private hospital for treatment at a lower fee. He was provided initial symptomatic treatment to help stop the bleeding from his hand. Later, the treatment continued at ESI hospital but it was not

done properly as per Ravi. His hand got worse but the ESI authorities refused to transfer him to any other hospital. After much persuading, he was transferred to a reputed private hospital where the rest of his treatment was done.

Frequency of Accident

In his factory, this was the first case. After his accident, no such incident has taken place. He said that there are different kinds of machines and each one involves some risk; one has to be careful while working on it. But he has heard about a lot of accidents happening in other factories and also shared the case of a known worker in another factory whose hand was disabled after a similar accident.

Response of Employer

His employer seemingly took the responsibility of his treatment initially. All the expenses of the treatment were borne by him.

But now, he is refusing to pay Ravi the salary he is owed. When he asked his boss for the same, he was told that his treatment ate into his salary. He was asked to quit when he asked for sick leave. Ravi faces a lot of difficulty in operating the machine with one hand but his employer forces him to operate heavy machinery, regardless of his injury.

Impact

According to Ravi, there are no alternative livelihood options available to him because he neither has the education nor the skills to move to any other sector. Moreover, given his disability, he is unsure that any other firm will be willing to hire him. He faces difficulty while operating the machine. Even performing other jobs with one hand is difficult for him. This has made life quite difficult for his family, with his sister now being the only earning member.

19.4 Case Study # 4 – Sunil

Background

20-year-old Sunil belongs to Rai Bareilly, Uttar Pradesh. His family consists of six members, which includes his mother, brother, two sisters, sister in law and a niece. He migrated to Gurgaon seven years ago for work. When he came here, he worked as a helper in an export factory and earned only Rs. 3500 (USD 55) per month. He shifted to the automobile sector because he was offered better pay. Now he is working with an automobile factory and getting Rs. 6600 (USD 110) per month. He stays here with his brother who is a tailor in an export factory and earns Rs. 9000 (USD 150) pm. The two of them support the family.

Training

No training is provided to the workers. They join as helpers and then are asked to observe the machine operators and learn from them. As soon as they learn to work on the machine, they are asked to work as machine operators. Sunil has not been trained ever since he started the job.

Sunil says “I was just asked to observe the machine operator when I was a helper and then I gradually learnt it.

Safety Measures

No training is provided to the workers on safety measures and precautions. There are no sensors in the machine. All the machines are manual; there is no automatic machine in the factory. Nobody brings this issue up, as the workers are afraid of losing their jobs. He says with a lot of disappointment -

“Nobody talks about it. My seniors don’t say anything so we also don’t. There is nothing in the machine, which can save us. If the clamp falls, it falls.”

There are no scheduled and periodic inspections or supervision done in his factory. The machines are checked once in six or more months. If the machine is not working the way it is supposed to, the maintenance team finds and fixes the error. However, there doesn’t exist any protocol for machine maintenance and servicing.

Safety equipment is available but Sunil said that it is not required while one is operating the machine. Gloves, if worn at the time of operating the machine can get stuck to the machine and lead to an injury.

“These (safety equipment’s) are available but at the time of operating the machine these are not required at all. These are required when we have to transfer the dies from one place to another. Gloves might get stuck in the machine and lead to an accident.”

Workers’ Attitude and Work Pressure

The workers are not given any training on safety measures therefore the workers are not aware about the importance of the same. They follow or ignore the safety precautions as per their will. While working on the machines there is no safety equipment that can be used for protection.

The workers are pressurized to work faster by the supervisor. The employer asks the supervisor to complete the targets faster and the pressure trickles down to the factory floor. Sunil himself was asked by his supervisor to pick up the pace.

The Accident

Sunil was working on a manual plastic molding machine when he met with an accident. He had to put the object in the machine and then press the paddle and remove the processed components afterwards. The clamp had been designed to close only when the paddle was pressed. On that day, while he was inserting the object, he accidentally pressed the paddle while his hand was still inside. He lost his hand in that accident.

Medical Treatment

There is no first-aid available at Sunil’s factory. He was straightaway taken to a private hospital nearby; there, no medical aid was given for unknown reasons. He was then taken to the ESI hospital where proper treatment was not administered. The doctors just bandaged his hand and asked him to come later.

His hand started hurting again in the evening and he called his contractor. The contractor took him to the ESI hospital where they changed the dressing and asked him to come on Monday. His hand started aching and bleeding again. Sunil did not wait till Monday, as doctors at ESI were very careless about his injury. Dissatisfied and in pain, he went to a government hospital in Delhi on Sunday itself. He underwent surgery there and was admitted for a day. Now, his treatment is still ongoing in that hospital and he goes there with his neighbor. The factory owner or the contractor is not at all worried about him and he gets no support from them.

Frequency of Accident

Sunil said that he has heard about three such accident cases that had previously happened in his factory. None of them got any compensation from the factory. Minor accidents are quite common in the factory. Every now and then the workers get scratches and cuts on their hand and fingers, as they continuously have to work on the machines and with sharp tools.

Response of Employer

Sunil does not have a direct contact with the employer. But he spoke once to the HR department about the injury. He was asked to be patient till the payment due from ESI comes through. The factory has given no financial assistance so far. Sunil says “I don’t have any contact with the employer as I am on contract. But he asked me to have patience, as I will get money from ESI. But I don’t have any trust in them.”

The contractor had made his ESI card on the first day itself but had not given it to him. After the accident, the contractor helped Sunil in getting the ESI card. He has also been assisting him in getting a permanent card. But, no assistance has been provided in terms of the treatment he is undergoing at the hospital. The contractor assures him that he will get his job back once his hand heals, but Sunil is not fully confident of his words.

Impact and Way forward

As of now Sunil does not know the extent and nature of his injury because the dressing has not been removed yet. But the doctors have told him that one of his fingers was fully severed and another partially severed in the accident. He is not sure whether or not he will ever be able to function with the injured hand.

With no one else to contribute after Sunil’s injury, his brother is the only one taking care of the family. He does not want to move back to the same work again as he is afraid of losing more fingers. He does not want to take more risks but if he does not find any other job, Sunil will have to go back to the same factory and work. Sunil does not think that he will be able to get work anywhere else because his hand is already injured. He is not sure whether any other factory will be willing to hire him.

19.5 Case Study # 5 – Surrender

Background

Surrender is 20 years old and has done an ITI course in Diesel Mechanics. He originally belongs to Alwar. Surrender is the only breadwinner for his family, which consists of his mother, father, his wife, and an elder brother. His father works on a leased field. After completing ITI, his first choice was to work in the automobile industry. He migrated to Gurgaon and started working with an automotive manufacturing factory.

Training

No formal training is provided to the workers when they join. The newcomers learn while operating the machine and helping the operator. This was the primary reason for Surrender's accident. The worker who had recently joined was operating the machine and learning while operating it. He was not given any formal training.

Surrender himself has not received any training so far. He was asked to help the operator initially and was later asked to work on the machine. No safety training is provided to the workers. The workers learn about the safety measures from their co-workers.

Safety Measures

Surrender says – “The factory is not concerned whether or not safety equipment is available. Safety is considered to be solely the workers' responsibility. Sometimes they even say that we should just work with a focus; gloves or any other safety equipment will not make a difference.”

As safety gear they are given Eye Protectors, Hand Gloves and Helmets. The supervisor is not very concerned about making these available on a timely basis, as he believes that wearing safety gear will hardly reduce the frequency or impact of any accidents that occur on the factory floor. If safety gear is damaged, workers are provided new ones only in the next shift. They have to manage with damaged ones until the next shift starts.

Workers' Attitude and Work Pressure

The workers do not follow the safety measures either. If they get safety equipment, they use it but work without it if they do not. But the work never stops. Nobody raises any concern about the availability of safety gear. “It has now become our habit to work without safety measures” – Surrender says.

Though there is no constant work pressure on the workers, they are forced to work overtime whenever the factory requires it. The day he met with the accident, Surrender claimed to have worked for 36 hours in continuity.

Surrender says – “The Factory does not have any concern for the workers, they are only concerned about production, and therefore the work does not stop even for inspection of the machines.”

The Accident

Surrender's accident happened on a Sunday while he was working overtime. A new joiner in the company was learning to operate the fork lifter. Surrender was counting the beams when the trainee suddenly hit him from behind. The beam penetrated his leg and Surrender shouted for help. A fellow worker rushed to move the machine off his leg.

Medical Treatment

Surrender was not provided any first-aid, as there was none available in the factory. He was taken immediately to a private hospital in Bhiwadi but was refused treatment there. From there he was taken to a private hospital in Gurgaon. Surrender was unconscious throughout. His treatment was administered at the hospital and the expenses of the same were borne by the contractor. He underwent surgery and an iron rod was fitted into his broken leg. They also wanted to insert a plate, but the contractor refused, as it would have increased the cost of treatment. His contractor got him transferred to the ESI hospital afterwards.

After the initial medical aid was given, the rest of Surrender's treatment continued at the ESI hospital. Surrender's leg is worsening with time. The doctors are unable to provide him the appropriate treatment; they kept saying that the wound would heal with time if kept open. Surrender followed their instructions, only to have his leg hurt more. Now, they have asked Surrender to revisit the private hospital as his treatment started there. Surrender has even sold his farms for his treatment.

Frequency of Accident

Surrender shared that such accidents are very common in the factory. They keep on happening. Many of the accidents are treatable where the workers get small cuts and minor fractures; they recover in a short period of time. Surrender could recall one severe accident that happened in his factory in which the worker lost his life.

Response of Employer

Surrender is not on the factory's payroll; he is on contract therefore the factory is completely out of this matter. They have no involvement in Surrender's treatment. Nobody from the factory has even met him till now. It is the contractor who has been supporting him. He brought him to the hospital and spent around Rs. 4 lacs (USD 6500) on his treatment. He helps him in getting leave and pay from the ESI. However, he is facing issue of not getting his temporary ESI card updated. The ESI hospital officials said that Surrender's ESI card had expired while Surrender claims that the card was renewed at an ESI branch few months ago.

Impact and Way forward

Surrender is the only earning member of his family. His father cannot work, as he is ill and aged. Now, when he is unable to work, there is no one else to take care of his loved ones. Surrender's leg is worsening with time and he hasn't to find the right treatment. He does not know when he'll be able to stand on his legs again and go for work. He has not received any compensation from anywhere and is relying upon the irregular payments he gets from the ESI.

He has sold his farm as there is no one else to take care of his home and he needs money for his treatment. He comes all the way from Alwar to Manesar for his treatment.

19.6 Case Study # 6 – Suraj

Background

18-year-old Suraj belongs to the Hisara village of Bulandsheher, Uttar Pradesh. He stays alone in Gurgaon while his family lives in the village. His family consists of his father, mother, one elder brother, four sisters and his sister in law. His brother and his father are both engaged in farming and they run the household. One of his sisters got married in May 2015; the other three are unmarried.

Suraj recently shifted to Manesar along with his uncle who gave him a job in his own small auto part-manufacturing factory. The factory is only a few months old and there are only 9 machines and 12 employees.

Training

Suraj or any other worker in the factory did not receive any training before they started operating the machine. Suraj just observed his co-workers for a few hours and then he himself started working on the machine. He operated the machines for 2 days and felt confident enough to perform the task on his own without supervision.

“Operating these machines is very easy; I just had to press the button after fixing the object. Even a child can learn to operate it on his own. I don’t think I required any training”

Suraj is quite new to the sector; he found operating machines very easy and was unaware of the dangers involved. Nothing related to safety while operating the machine was communicated to him.

Safety Measures

Suraj was neither aware about the accidents that can happen on the factory floor nor about safety measures preventing the same. There is no supervisor to inspect the machine and workers. No safety equipment is provided to the workers.

Workers’ Attitude and Work Pressure

The other workers in the factory have some previous experience in operating the machine. Self-discipline is a must in this factory because lack of supervision makes it all too easy for the workers to disobey safety rules.

The factory is very new, just a few months old therefore, so far, there is no work pressure. The workers are not pressurized to complete the work on or before time.

The Accident

On his third day of his job, he met with an accident. Due to lack of proper training, he held the machine cap of the object in a wrong manner and the die got stuck. His right hand got caught in the machine and he lost two fingers of his right hand.

Medical Treatment

As soon as the accident occurred, his co-workers, covered Suraj’s eyes, wrapped a cloth around his fingers and rushed him to a small private hospital. His treatment is now ongoing in the same hospital where he was admitted for 5 days. The expenses of his treatment are being borne by his uncle, the owner of the factory.

He was not taken to ESI hospital, as he does not possess an ESI card, in fact, he is not even aware about it. The doctors said that it would take around a month or two for his

hand to be fit for work again.

His employer is now saying that he will get his ESI card soon.

Frequency of Accident

Since the factory is still in its infant stages, so far this is the first case that has happened. However, in the absence of any training and safety measures, the likelihood of such incidents occurring again is all too real.

Response of Employer

The employer is one of Suraj’s relatives. He has taken complete responsibility of his treatment. From getting him admitted in the hospital to purchasing any medicine he requires, his employer has been with him throughout. All the expenses of his treatment are borne by his employer.

However, Suraj has neither discussed nor been given any monetary compensation as yet.

Impact and Way forward

There are nine members in Suraj’s family. Suraj’s father and brother are the only earning members of the family. He has not yet told anyone in his family about the accident because currently all his family members are engaged in harvesting of crops. He doesn’t want to worry them, or have them abandon the farms to come and take care of him.

“If I tell them, they all will come here. If they will take tension, I will also get tensed. When I’ll be fine, I’ll tell them about it.”

Moreover, at the time of the accident everyone at home was occupied with preparations for his sister’s wedding and he didn’t want to add to the existing pressure.

Suraj is not at all willing to join this job again as he now has a distinct fear of hurting himself more than he already has.

“Today I have lost my finger, tomorrow what if I lose any other part of my body, we are only two brothers, how will we run our home?”

19.7 Case Study # 7 – Raja Shah

Background

23 year old, Raja originally belongs to Bihar. His father is a fruit vendor who migrated in search of livelihood when he was very young. They don't have farms and there were limited opportunities available in the state of Bihar at that time. The whole family had migrated to Punjab in 2004 and then to Gurgaon after a few years. Raja and his father are the earning members in their family of four.

Raja started his career with an entrepreneurial spirit. He tried his hands at a few ventures like making and selling "Paapads". However, he found it difficult to break even and due to lack of capital, had to move to an industrial job. Raja was confident that he would start earning profits after a few more months, but his father didn't allow him to take risk. He still regrets that. He got a job in automobile parts manufacturing factory through a friend's reference.

Training

There had been no formal training given to the workers to operate the machine. A new-comer never works on the machine directly. He is first engaged in unskilled tasks as a helper and eventually moved to smaller machines. Raja Shah has never received any training in his career. He says that only people at managerial levels go for trainings. In his previous factory Raja used to operate the automatic machine whereas here he had to operate the machine manually. He learnt it only by working as a helper at the initial stage and gradually, after 2-3 months, he started operating the machine on his own.

Safety Measures

So far nobody in the industry has communicated to the workers about the possible injuries that can take place. There are no safety instructions written on the machine. Inspection happens on a regular basis. Anybody not following safety measures is scolded and made to wear gloves or follow other measures. The gloves are easily available and can be re-issued as soon as the previous ones are damaged in some way.

Workers' Attitude and Work Pressure

Raja was feeling unwell on the day of accident, due to which he was a little slower than usual. The foreman got annoyed with this and scolded him, pressurizing him to work faster. In order to run the machine faster he lost control and his hand got stuck in the press. Only after he pushed the button again was the hand relieved.

He shared that the supervisors are also pressurized by upper management to complete targets on time; therefore, they are not the only one at fault here.

Raja Shah, as all his fellow workers, tries to work as much as possible in order to earn overtime. 12 hours of work a day is normal and sometimes it stretches to as high as 36 hours. They can't take breaks as that would lead to wastage of electricity and the owners never like that to happen.

The Accident

While operating a manual machine in a factory, Raja was working under extreme pressure to increase his output. Under pressure, he lost control of the machine and his hand came in the machine. He lost two fingers of his right hand in that accident.

Medical Treatment

After the accident he was given first aid, his hand was bandaged and he was taken to a private hospital as he didn't have an ESI card. He was kept there for 2-3 days and then taken to the ESI hospital once the card was prepared. The expenses of the private hospital were borne by the factory itself. Raja didn't face difficulty at ESI for getting the right treatment. One stitch in his finger is yet to be removed and he will soon be visiting the ESI hospital for the needful.

Frequency of Accident

The frequency of such incidents is pretty high. Raja himself has heard about a lot of accident cases that have happened on the factory floor. Though many injuries are minor ones, like cuts in the hands and fingers, the numbers of cases that showcase severe injuries are no lesser.

According to Raja such incidents are regular occurrences in the factory. Last year two people met with severe accidents in the press shop and lost their hands in the process.

Response of Employer

Raja is not receiving any money from the ESI as he is on medical leave and the report prepared by the factory is not as per ESI requirements. But, when Raja went to the HR department he was ordered to leave, as workers are not authorized to enter office premises. The HR department didn't even listen to the problem and said that the report prepared was perfectly fine. This has happened 3-4 times. After a lot of pleading, the HR department asked him to talk to his contractor.

The contractor listened to Raja and promised to help, but nothing concrete has happened for a long time. Finally, the contractor helped him get salary for the months he had worked before the accident. The factory had denied even that after the accident.

Impact and Way forward

The doctors have informed Raja that it will take around 3-4 months for his hand to heal and that he can't work till then. If he tries to, the situation will become worse. Raja is thus unable to bear his expenses in the city and has moved in with his sister. They have 5 kids and very little space to accommodate him.

He has sent his family to his hometown with two months' salary he has received, as they were struggling to survive. With no other options left and a two year old at home, Raja's father has started working longer hours, putting his physical health at risk.

Raja said that this is not a government job and he will start his own business now. He can also get job elsewhere. But upon further enquiry it was revealed that he didn't have much of an idea for starting a business. He seemed willing to join back the same factory if he gets the money due to him. If he doesn't get the money, Raja is willing to file a case against the factory.

19.8 Case Study # 8 – Visheshwar Ray

Background

Like most of the youngsters in his village, Visheshwar had migrated to the city to sustain his family. 52 years of age, he has been working as a contractual worker in an automobile manufacturing unit in Gurgaon for the past fifteen years. After working for 12 to 16 hours a day and undergoing a lot of hardships, he is able to save around Rs. 6000/- (USD 90) every month and send it home.

Training

He has never received any formal training on operating the machine or safety measures in any of the four factories that he has worked with. Like all others on the shop floor, he had learnt to operate the plastic-molding machine while working as a helper for many years. Given his experience of running the same machine for more than a decade, the accident came as a surprise to him even though he knew that it is quite common in the industry.

Safety Measures

Visheshwar has never witnessed any inspection for safety measures like gloves, head gear etc. ever since he has joined the factory. As per his account, the factory has no concern towards workers' safety as they can easily get replacements through contractors. "The supervisor is concerned only about the production targets and doesn't care whether workers are wearing hand-gloves or not." Moreover, cloth gloves that do not meet the safety specifications are provided and they do not last more than two hours as they get torn off due to heat and friction. Therefore, workers use layers of torn gloves, as they can't manage with a single pair due to heat produced by the machine.

There was no safety mechanism in the machine earlier, but after his severe accident, the factory has installed the safety mechanism in machines (only after repeated insistence of workers). "Now, if the hand is inside the machine, mold will not close. If this was done earlier by the owners, my career would have been saved."

Workers' Attitude and Work Pressure

As per Visheshwar, workers are always cautious of accidents, as the workers are aware of the risk associated with the machines. They are also concerned about the survival of their families in case they are unable to work. "If I was not worried about safety measures, why would I be wearing layers of gloves", shared Visheshwar.

But, he also affirmed that due to high work pressure there is always a chance of loss in concentration and that can lead to an accident. The factory runs 24 hours, 7 days a week in three shifts. There are no holidays, not even gazette or national holidays. There are no paid leave and salary is deducted even if a worker takes one-day leave.

The shifts keep changing on weekly basis and therefore the sleeping pattern always remained disturbed. The workers are not allowed to rest even for a few minutes at the shop floor. Visheshwar shared an incident when the owner's son got furious at a worker having a cup of tea. He taunted him for having tea, stating that the electricity was being consumed and wasted while the worker was having his tea. He snatched the teacup from worker's hand and threw it away. The machine never stops.

"In case there is any emergency, e.g. if we have to go to the washroom we don't have any option but to stop the machine and go. But, within 5 minutes owners would come

looking for us and abuse us for stopping the machine."

There have been instances, when there was a shortage of workers and Visheshwar had to work continuously for 24 to 36 hours.

The Accident

One day, while working on the die machine, the pressure of machine started to fluctuate and it required either replacement or straightening of the machine hinges. As a cost saving measure, the factory encouraged maintenance and straightening of the hinges and not their replacement with new hinges. When Visheshwar did the same, the first hinge was straightened perfectly. However, while working on the second hinge, his right hand got caught in the machine. The wrist of his right hand was broken and he suffered a permanent deformity with no sensations in the hand.

Treatment

After the accident, he was taken to a small private hospital in Gurgaon for first-aid, and later he was sent to ESI. Looking at the seriousness of the case, the ESI doctor referred him to a larger private hospital. He was hospitalized for 11 days and underwent an operation as well. The treatment cost was borne by the employer. Post discharge from the private hospital, he now visits ESI hospital for periodic follow up examinations and leave approvals.

Even after months of accident Visheshwar remains unclear about the ESI rules. As per him, earlier a person used to get "pension" as soon as he met with the accident, but now they will get the money only after issuance of Fitness Certificate. He had a temporary ESI card made long back; however, he said that the card was still working. It gets renewed regularly. He has still not received the permanent ESI card through which he and his family can get the treatment from any ESI hospital.

Frequency of Accident

5-6 similar accident cases have happened in front of Visheshwar over last few years. One person lost his fingers on the same machine as Visheshwar. He went gone back to village thereafter. A young boy lost his thumb and is presently being treated. Another person's leg was badly hurt after coming under the die. Visheshwar recalled an accident that happened few months back in which a fellow worker had lost four fingers of his right hand. "He filed a case, however, the factory paid him Rs 15000 (USD 250) and he went back to his village as he didn't have means to survive in the city and fight his case. Locals would fight out for their rights and normally get the compensation much more easily."

Response of Employer

Visheshwar is not sure if the employer will take him back on job. He goes to the factory daily and waits for the owner till evening but is always ignored. "Even yesterday I sat the whole day in the factory. Owner never enquired about my hand or health. When he saw me sitting, he just ignored me & left in his vehicle." Visheshwar expects the management to provide for his food and daily expenses till he recovers from his accident. However, he has not received any such support till date and there are some people from his village who have contributed wheat flour, rice and pulses and helped him. "The factory never retains anyone who has had an accident. The owners try to get rid of such people even though they can still be engaged in unskilled jobs. There is no dearth of laborers in Manesar and anyone with accident can easily be replaced."

Therefore, Visheshwar has lost his motivation to work in the city. At this age he is not sure of getting employed elsewhere. He said he should be able to find some work in a

factory near to his village where he may be able to earn Rs 4000 to 5000 (USD 67 to USD 84) per month.

Impact and way forward

One of his sons has recently started working in a medical store in Hajipur and earns Rs 5000 per month. He is married and has two kids.

With an extended family and a meager income, Visheshwar's family is currently struggling to meet the living expenses. Visheshwar is therefore desperate to work again in any factory and in any kind of job. He is also thinking of having his son migrate to Gurgaon as Visheshwar believes that his son can earn much more than before in the city. But, with ailing parents at home, this looks difficult. With no other alternative, Visheshwar's wife, who is now living with him, has joined a garment export house as contractual worker. She has been promised a salary of Rs 5000 per month.

19.9 Case Study # 9 - Pradeep

Background

Pradeep is 19 years old and has studied till class 10th. He originally belongs to Jhunjhunu, Rajasthan. His elder brother is a tailor and has been working at a shop in Manesar for last nine years. His younger brother is still studying in the village and stays with their uncle and aunt. His eldest brother is the one who runs the household. Pradeep had recently started working and unfortunately met with an accident just at the beginning of his career.

Training

It had only been one and a half month since Pradeep had joined the factory. He was not provided any training on shop floor and machine operations. He believed no training was required as he was working as a helper and not operating the machine on his own. The factory supervisors also suggested that no training is required for helpers.

"If I do not operate any machine, why will they tell me about it, what training will they give me for a helper's work?" said Pradeep

Unfortunately, the lack of knowledge of machine operations and safety protocols played a critical role in his accident.

Safety Measures

Pradeep said that the factory took care of the safety of the machine operators. All the machines were equipped with safety sensors. The supervisors regularly informed the workers about safety measures and their importance. All the safety equipment, such as gloves and helmets etc., were also provided to the operators on time. However, the "helpers" were ignored and they were not covered under the safety protocol of the factory.

The supervisors regularly checked whether or not the workers operating the machine were following safety measures. They even inspected the machines regularly and if any fault was found, it was repaired immediately. Again, the "helpers" were ignored during any such inspection and conversations. They were taken too casually as they were perceived to be out of danger.

Workers' Attitude and Work Pressure

The workers are never careless about their safety; they use all the safety equipment. As they were regularly told about the importance of safety measures, the workers took the safety measures quite seriously. Pradeep informed that there was no work pressure on the workers; they worked within their shift of 8 hours. Pradeep shared that the workers were allowed to work freely. Even if somebody took rest for some time during the shift, it was acceptable to the supervisors.

The Accident

One day while working on the injection-molding machine, Pradeep met with an accident. Due to lack of knowledge about the functioning of the machine, he accidentally touched the sensor while he was cleaning the machine, causing the machine to start, while his hand was still inside it. Two fingers of his right hand were severed in the accident.

Medical Treatment

First aid was available at their factory but he was straightaway taken to a small private hospital because the injury was very severe. His co-workers just wrapped a cloth around

his hand and rushed him to the hospital. At the hospital he was not given proper treatment so he was taken to a bigger private hospital for medical care. Unfortunately, two fingers of his right hand were completely severed. He was not taken to ESI hospital, as he did not have an ESI card.

Frequency of Accidents

Pradeep has not heard of any other accident that has happened in his factory in the past 15 years. He has heard that his is the only accident to have occurred in the factory.

Response of Employer

The employers were quite supportive. They have assisted him throughout his treatment. A HR employee always accompanied him to the hospital and to ESI to facilitate medical aid as well as ESI benefits. They still stay with him till the time he does not get the treatment or approval for leave and then drop him home. They also follow up regularly with Pradeep to enquire about his health & have assured him support, in case of any problem.

There are on-going discussions towards making him permanent as well as giving him some compensation. However, the final decision about making him permanent depends upon top management. HR personnel have assured that they will talk to the head of the factory and discuss the same.

The contractor has also provided their complete support. They have assured Pradeep that he will be made permanent and receive compensation. They have even assured him of their support in case he faces any issues with the employer.

Impact and Way forward

Two fingers and a thumb of his right hand have been severed completely. His hand is still bandaged. Due to his injury he might have to face a number of difficulties while performing his work. He is the youngest in the family and had recently contributing to the family income. The entire family is worried about him and anxious about his future. The factory has been very supportive and cooperative so far. Therefore, he has no problem in joining the same factory again. He thinks that any compensation paid can never give his fingers back. He is unaware of the alternatives available to him. His limited educational qualifications and skill set make it that much harder for him to find a better job.

19.10 Case Study # 10 – Rohit

Background

Rohit is 23 year old and has studied till class 10th. He belongs to Hardoi, Uttar Pradesh. There are seven members in his family, his mother, father, his wife, a 2-year-old daughter and two younger brothers. He is the eldest son and the sole earner of the family. His father remains ill and is not able to do any work. Both his younger brothers are studying. The total monthly family income is Rs. 9000 (USD 150), which is earned by Rohit; there is no other source of earning for them.

Rohit migrated to Delhi along with a relative who has a small factory in Vikas Puri, Delhi. He started working there and learnt to operate the machine over last few years.

Training

Rohit was not provided any formal training when he started working in his current factory or even the previous factories. Initially, for around two days Rohit and other new recruits were asked to help an experienced operator and from the third day onwards, the new workers are instructed to operate the machine independently.

No training is provided for safety measures as well. They are not given any guidance or instruction on risk associated with the machine and tips to avoid workplace injuries or accidents. The lack of proper safety training leads to adoption of wrong practices by the workers. Rohit himself had often witnessed wrong dies being uploaded in the machines, which at times resulted in serious accidents.

He said “Many a times I have seen wrong dies being loaded on the machine but nobody raised their voice as they have fear being warned or replaced by the employer”

Safety Measures

There are no sensors in the machine. While working on the machine, the workers are supposed to wear gloves and helmets. But as per Rohit, the protective gear is of inferior quality and doesn't provide sufficient cover from accidents. Workers are also mandated to wear safety shoes in the factory premises but are expected to arrange the safety shoes on their own.

A separate team undertakes inspection of the machines. They machines are examined for smooth functioning, errors and defects. If there is any issue with the machine, it is repaired immediately. The inspection team also monitors worker's compliance towards use of safety gear & equipment. However, no action is taken against the workers for compliance. Also, in case the gloves are damaged or lost, the workers are not provided replacement easily; there have been times when the workers had to work with the torn gloves and the inspection team did not provide new gloves.

Workers' Attitude and Work Pressure

The workers are often asked to upload wrong dies on the machine even when they know it should not be done. Nobody points out this issue in the factory. Nobody even raised their voice against the lack of sensors in the machines or non-availability of high quality protective gear.

There is no such work pressure in the factory, the workers work within their shift time with 2-3 hours overtime for which they are paid.

The Accident

Rohit was working on the robotic welding machine, when the clamp suddenly broke down. Rohit didn't have time to take his hand out of the machine, and lost two fingers of his left hand.

Medical Treatment

No first-aid was given at the factory and there was no provision for the same. After the accident, he was straightaway taken to the ESI hospital. He was discharged after initial treatment. The factory has provided him a bed so that he can rest properly and can get the care he needs.

He is currently receiving follow up treatment at the ESI hospital and it will take around two months for complete recovery. He is always accompanied to the hospital by the contractor, who picks him from home, helps him in getting the treatment at the hospital, and then again drops him back.

Frequency of Accident

Rohit shared that such accidents are quite common in the sector as well as in his factory. He himself has seen a severe case that happened in front of him. A worker was working on the machine and both his hands got stuck in the machine. Unfortunately, the worker lost three fingers of both hands.

Minor injuries are quite common and keep on happening every now and then.

Response of Employer

Rohit is on the contractor's payroll. After his accident he asked his employer to make him permanent. Rohit wants a written agreement, that assures him job security, to be drawn up. He spoke to the employer about it but his request was denied.

"They simply said you couldn't be on company's payroll. If you are not happy, you can change the job" informed Rohit about his discussion with the employer.

Later, when the HR personnel came to meet him, he asked the same but they ignored his request. He also wants some financial support & monetary compensation but the factory has not agreed for the same.

However, the contractor has been quite helpful during the course of Rohit's treatment. He has supported in during his treatment as well as for approval of leave from ESI. But, the contractor has also failed to provide any assurance towards making him permanent and provision of any monetary compensation.

Impact and Way forward

Rohit is the eldest son as well as the sole bread earner of the family of seven. Now, when he is not able to work, there is no one else to take care of his family as his father is ill and cannot work. He has not received any financial help from the factory and still doesn't know how he will run his household. He is relying upon the payments he will receive from the ESI, none of which have turned up so far. He is trying to become a permanent employee and get on the factory's payroll so that he has job security and does not face any issues in the future; however, he has not received any positive response yet.

Rohit feels that there is no point looking for other work, because he has already invested a lot of time and energy into this job. Moreover, no one else will hire him due to his disability. He believes that he has no option but to go back to the same factory and work there.

19.11 Case Study # 11 – Ravinder

Background

35-year-old Ravinder belongs to Mahendergarh District, Haryana. His family consists of five members: his father, his wife and 2 children. He migrated to Delhi 15 years ago and worked there for 12 years and learnt everything about dies, molding machines etc. Three years ago he moved to Gurgaon and joined his current factory. He works on injection molding machines here. He is the only earning member of the family and they are completely dependent on him for their day-to-day needs. His father tills a small plot of land, which does not yield much income for the family.

Training

There is no formal training given to the workers in his factory. The workers join as helpers first and gradually learn from co-workers to operate machines. Ravinder also joined as a helper and learned how to run the heavy machinery. His prior experience in working on the machine ensured that he could make a smooth transition from helper to operator in a few days.

Though there is no formal safety training given to the workers but the supervisor regularly reinforces the importance of safety measures. Ravinder has not received any formal safety training in any of the companies he has worked with so far.

Safety Measures

The supervisor informs the workers about safety equipment and asks them to utilize the same. Supervisors regularly check and make sure that everyone wears the safety gear while working in the workplace. They also communicate the importance of wearing helmet, gloves and safety shoes while operating heavy machinery.

They inspect the machines frequently. Also, there are different teams for inspection and maintenance of machines. Whenever any problem occurs in the machine, it is addressed immediately.

Workers are reprimanded for not being cautious at work. Supervisors are very strict about the safety of workers and keep a regular check on them.

Safety equipment is accessible and available at all times. The factory provides helmets and safety shoes to the workers twice a year.

Workers' Attitude and Work Pressure

Most of the workers are quite careful about their own safety. But, there are still few workers who are ignorant about the same. They do not follow the safety measures specified by the firm. Ravinder suggested that the ignorance of safety norms is often due to lack of safety training for workers.

There is no work pressure as such but during the winters, the workload increases. Whenever the targets are higher, the supervisor hires more workers rather than burdening the existing workforce.

The Accident

It was like any other day in the factory and Ravinder was operating an injection-molding machine as usual. Unfortunately, a component held by a crane came loose and fell on his hand before he could take evasive action. Ravinder injured his right hand during the accident.

Medical Treatment

First-aid is available at the factory; it is quite useful in case of minor injuries, but in his case first-aid was not helpful. He was straightaway taken to the ESI hospital. His entire treatment was administered there. Though the treatment is about to run its course and the wound has almost disappeared, Ravinder is still unable to move his palm and fingers. The doctors have advised him to exercise his stiff fingers at home for at least 8 months. However, the doctor has not made provisions for physiotherapy. After 8 months the doctors will check his hand again and decide on further course of action.

Frequency of Accident

No accident has taken place in his factory over last three years. Ravinder's was the first case ever recorded.

Response of Employer

Ravinder is on the factory's payroll. The factory is quite supportive; they asked Ravinder to join back, which he has recently re-joined the factory. The employer stood by him during his treatment as well. They even offered to pay for treatment from another hospital, should he wish to go elsewhere; they were primarily concerned about his hand's recovery. However, there was no monetary support or compensation given by the factory.

Post his accident; the supervisors do not give him heavy work and have provided Ravinder, the flexibility to chose the work he is comfortable with.

Impact and Way forward

Ravinder is quite experienced but after the accident he has been facing a lot of issues at work. He is not able to move his fingers much. He finds it difficult in grabbing and picking up things, creating issues in his everyday work. His efficiency and productivity have deteriorated drastically.

After rejoining, he only works on PLC machine wherein he just has to set the programming for the machine on the computer. Earlier he used to do all work related to machine.

Since, he is the only earning member of his family, the thought of limited professional growth and permanent disability are extremely disconcerting for him.

19.12 Case Study # 12 – Ashok Kumar

Background

Ashok Kumar is 21 years old and belongs to Nawabpur, Uttar Pradesh. He is a high school dropout. There are five members in his family including him, his parents and two siblings (a brother and sister). His father and brother are farmers in the village. He is the only one who stays in the city. Here, he is able to earn around Rs. 10,000/- (USD 165) per month, including multiple days of overtime. He sends around half of his earnings to his family, which is essential for their survival.

Training

Though there is no formal training, a person generally starts as a “helper” and learns from the fellow machine operator. With time, new joinees learn to operate the machine and they start working on it independently. However, due to lack of formal training they also learn all wrong practices being followed. In this case, Ashok learned to bypass the safety mechanism in order to work faster.

The supervisors periodically inform the workers about the safety norms. The workers are instructed to look after themselves as well as of others while working on the machine. However, there is no formal training or reinforcement of safety messages, and reinforcement of importance of safety is highly individual driven.

Safety Measures

The workers are asked to wear gloves, shoes and helmet on the factory premises for their safety. Supervisors regularly check whether or not the workers are using the safety equipment provided. Whenever required, the factory also makes gloves and helmets available.

The helmets drastically reduce chances of head trauma. However, the gloves are made of a simple cloth, therefore, in case of injuries such as Ashok's, they are of no help. The gloves are seen as a procedural requirement” rather than safety equipment by the supervisors.

Workers' Attitude and Work Pressure

Workers are told about safety measures but not all of them follow safety rules and regulations. The machine has two buttons and the workers are supposed to work with both hands so that they keep their hands away from the machine. At times, to work faster, the workers stick something on one button so they can work with one hand. This can lead to accidents. The supervisor regularly checks whether the workers have stuck anything on the machine or not and if they find anybody doing so, they immediately ask them not to do it and scold them for the violation. However, there is no further penalizing even after repeated infractions.

The Accident

While working on a die-casting machine, Ashok was trying to work fast and avoided safety measures. Due to his negligence, he met with an accident. And three of his left hand fingers were severed under the machine.

Treatment

Ashok's accident happened on Saturday, a day when the doctors are available for only a short time period. The doctors at ESI were not available therefore he was immediately taken to a small private hospital nearby. Initial treatment was administered after which he was referred to ESI hospital. The rest of his treatment was carried out at ESI. He was

satisfied with the medical aid he received. Upon further enquiry it was realized that the employer played a key role in getting him the right and timely treatment. A team from the factory regularly visited the hospital and facilitated the process at ESI.

Frequency of Accident

Ashok could not recall any serious accident that has happened in his factory over last one year, apart from his own. Minor accidents such as small cuts and wounds are common, but not serious accidents and injuries.

Response of Employer

The employers were quite supportive. They immediately took him to the hospital without any delay and the cost of the treatment in the private hospital was borne by them. The HR manager and other staff members came to meet him at the hospital.

When he joined back, Ashok's employer asked him to do the light work. Even now he is assigned light work so that he does not face any difficulty and is able to cope up with work demands smoothly.

When he was unable to work, the factory provided him monetary support for his everyday expenses as well. He was given Rs. 500-1000 (USD 8-15) weekly to meet his basic expenses.

Impact and way forward

Ashok has lost three fingers of his left hand. He is unable to pick any heavy material. He cannot operate the machine at all. Now, he only cleans the die. He cannot even shift the heavy components from one place to another.

While he was recuperating from the accident, he was unable to support his family but now that he's back at work, he sends money home regularly. But, the reduction in his salary from Rs. 9000/- to Rs. 6000/- per month has impacted his financial condition. Ashok feels that there are not many alternatives available to him. He feels that his productivity will suffer because of his disability. Now, he cannot work that much. Moreover, he thinks nobody will hire him, as he can't work properly with just one hand. He believes that he will continue to work as a helper and there is no scope for progress and increment in income.

19.13 Case Study # 13 – Birpal

Background

Birpal is only 19 year old. He originally belongs to Eta, Uttar Pradesh and recently migrated to Gurgaon in search of new livelihood opportunities. He found the job with the help of his friends and cousin who are already working in this sector. There are seven people in his family, his mother, father and four siblings. He is the eldest of all and his younger siblings are currently in school. His father is a farmer who finds it very difficult to run the family with reducing farm productivity and increasing living expenses. Therefore, Birpal left his studies and started contributing to the family.

Training

Birpal has been working in the factory since past two months only. Till date, he was not provided any training for his job. When he joined, he was immediately asked to operate a die-casting machine. Unlike others, he did not even work as a helper for a few days to learn the operating process and then start independently. Birpal had no prior experience in operating heavy machinery, as this was his first job.

Safety Measures

The machines do not have any safety sensors. There are four supervisors in the factory to inspect & monitor worker's compliance with safety procedures and guidelines. There is one die setter who inspects the machine regularly. However, the supervisors are not too concerned about compliances and about often ignore any deviations or violations of safety norms that may exist.

As for safety equipment, the workers are provided with gloves. But, many a time, the workers have to work near the fireplace (bhatti) and they end up burning their arms and wrists.

They are asked to wear shoes and gloves in the factory. While the gloves are provided to the workers by the factory, the shoes are to be arranged by the workers, on their own.

Workers' Attitude and Work Pressure

The workers are not given any training on safety gear; therefore they do not understand the importance of safety practices. The workers wear gloves but at times the gloves don't provide complete protection because arms and wrists continue to remain exposed. Shoes are to be arranged by the workers themselves therefore many of the workers end up coming in slippers. The guard checks the same at the gate and scolds them so as to prevent them from wearing inappropriate footwear. However, no formal action is taken.

There are two shifts of 12 hour each in the factory. The workers are supposed to work within their shift times. No targets are set for them and they are not pressurized to work faster, however, if a worker is wasting time on purpose, they are reprimanded and asked to pick up the pace.

The Accident

While working on a die-casting machine, during the night shift, he lost consciousness due to fatigue and met with an accident and fractured fingers of his left hand.

Medical Treatment

Birpal met with the accident at around 2.30 am in the night. As the accident happened

at the night, he could not be taken to the ESI hospital; he was taken to a small private hospital nearby. The supervisor took him to the hospital without wasting much time. The doctors were cooperative and quickly dealt with the injury. He did not go to the ESI hospital at all. The expenses of his entire treatment have been borne by the employer. So far, he has not faced any problems.

He has not yet had his leave approved by ESI. He went there but the window was closed. He is planning to go there soon.

Frequency of Accident

During the two months of working, Birpal has already witnessed 2-3 such accidents in the factory.

Response of Employer

The supervisor from the factory took him to the hospital immediately after the accident. He regularly enquires about Birpal's health and if any additional support is required. The employer even called his supervisor and asked him to help Birpal in getting his leave approved from ESI. The employer has asked Birpal to reach out to him in case the contractor does not cooperate.

Birpal shared that the contractor doesn't offer much support. The contractor agreed to accompany him to ESI but refused later. He continuously delays the process. It was only after receiving a call from the employer that the contractor started helping Birpal.

Impact and Way forward

The doctors have said that 2-3 fingers of his left hand have multiple fractures. They have not said anything about how long it will take for Birpal's hand to heal completely but have hinted that it might take a while. He might have to see a physiotherapist as well.

Birpal had recently started contributing to the family income but, ever since the accident, the entire burden of sustaining the family once again rests on his father's shoulders.

He is willing to rejoin the factory if his hand heals completely and has not thought about any alternative so far. He will think about it only after he finds out the final condition of his hand.

19.14 Case Study # 14 - Collector

Background

23-year-old Collector belongs to Allahabad, Uttar Pradesh. His family has 10 members - mother, father, brother, sister, wife, and 4 children. He is the youngest of all his siblings. His father and brother are farmers and own cattle.

Collector came to Gurgaon to meet the increasing expenditures of his family. He did not want to work in the farms like his brother and father. However, with his Grade 5 education, he was unable to find many opportunities.

Training

Collector has been working in the loading department of the factory; he was not given any training for his work. As per him - "It is a simple job; why would anybody need training just for loading and unloading the material."

According to Collector, the machine operators are provided safety training and are informed about all the safety measures. However, no such training is provided to the helpers and other staff who do not operate the machines directly.

Safety Measures

Supervisors inspect the machines regularly and any discrepancies are dealt with immediately. They also make sure that workers wear all the safety equipment provided to them by the factory, including safety shoes. However, they never inspect the materials and packaging departments.

Workers' Attitude and Work Pressure

Both, workers as well as the supervisor meticulously follow the safety measures. The workers make sure that they wear the necessary safety equipment while working. Collector has never seen a worker in his factory being careless about safety. He has even noticed supervisors regularly checking to make sure that safety norms are being conformed with.

Collector also shared that the factory does not create any kind of pressure on the workers. The workers are required to work only within the time limits of their allotted shift. They are not asked to do any overtime.

The Accident

One day while he was working on the shop floor, the floor was wet but there were no signage around to signal the same. Unfortunately, the wheel of the trolley that he was pulling broke down and Collector slipped on the wet floor, fracturing his left leg.

Medical Treatment

Immediately after the accident, Collector was taken to a local private hospital for first-aid. No first-aid was available in his factory. Along with first-aid, a temporary plaster was administered to his leg. He was then taken to ESI hospital where he received adequate medical care. He was accompanied and helped by his contractor and one person from the factory.

His treatment is still ongoing and he has to go to the hospital for regular dressing. He now visits the hospital on his own. He is quite satisfied with the aid provided by ESI hospital as he is well treated by the doctors.

Frequency of Accident

Collector could not recall any other major accident that happened in his factory. However, less severe injuries are quite common - small cuts, lacerations etc. Collector said his accident is by far the most serious.

Response of Employer

Collector is on contract but his employer is still quite concerned about his injury. He keeps tab on Collector and has facilitated arrangements for food and other necessities at his home. He has also promised him salary for the interim duration, till he recovers completely and re-joins the work.

The contractor's attitude is also quite satisfactory- he stood by Collector at the time of his treatment and provided complete support. Now, he is helping him get the salary for all the days he missed after the accident.

Impact and Way forward

Collector's treatment is still ongoing at ESI hospital. It will take some time for his leg to heal completely. The doctor has not mentioned the exact duration of the recovery period.

Collector's family has farms and cattle that serve as a major source of regular income. The injury will not negatively impact the financial security of the family, as he is hopeful of complete recovery.

Collector is satisfied with his job and the support of his employer and contractor. He has not faced issues with the factory so far, therefore is more than willing to go back to work for them again.

19.15 Case Study # 15 – Santosh Kumar

Background

22-year-old Santosh Kumar belongs to Orissa and has been living in Gurgaon for the last 2 years. He stays in Gurgaon with his brother who works as a supervisor in another factory; his sister is married and his parents live in the village. His father takes care of the farms in the village.

Santosh does not have higher education and couldn't think of many career options for himself. Two years ago his friends helped him migrate to Gurgaon and also supported him in securing a job.

Training

No formal training is provided in his current factory and preference is given to people with prior experience. Santosh learnt to operate the machine in the previous job where he was working in the same profile. There also he was not given any formal training. He first worked as a helper and learnt on the job.

Safety Measures

There are no proactive and periodic inspections of machines for any defects, errors or maintenance.

After the accident with Santosh, a button system has been installed, which requires air pressure to operate and ensures that the press shop machine doesn't come down if the handle is locked while working. The inspection team regularly checks the sensors now. They also advise operators to concentrate on work to avoid accidents.

Workers' Attitude and Work Pressure

Workers are unaware about safety measures. They are not given any training on safety measures. However, the supervisors tell them to concentrate while working on the machine but due to work pressure the workers have to rush so that they can complete the work on time.

The Accident

Manoj was told that the sensor of his machine was working properly. However, the sensor turned out to be faulty and it led to sudden closure of press machine. Manoj lost the thumb of his right hand in that accident.

Medical Treatment

Immediately after the accident, he was taken to a private hospital for first aid. There was no first aid available in the factory. He was then taken to the ESI hospital and was admitted in Emergency where the initial treatment was administered. The next day, he underwent surgery and was later shifted to outpatient department. His entire treatment was carried out at the ESI hospital. He is satisfied with the aid he has received and did not face any issues in getting the same. The employer played a significant role in facilitating the whole process.

Frequency of Accidents

Santosh shared that many similar accidents have taken place in the factory. He has seen three to four severe accidents over last one year, excluding regular minor injuries such as small cuts and lacerations that are quite common. Lack of training and high quality safety equipment increases to the probability of workplace accidents. .

Response of Employer

Santosh received complete assistance from the employer while he was being treated at the ESI hospital. The contractor as well as a co-worker accompanied him to the hospital during the initial treatment phase. He was also issued an ESI card immediately after the accident.

There was no other assistance provided by the employer, neither any monetary support to meet his everyday expenses nor any compensation. Santosh managed everything on his own.

After joining back, he was posted in the quality department where he does not have to operate the machine.

Impact and Way forward

When he joined back, the HR department asked him if he could operate the machine again and he said that he would. For a month he operated the machine and was then moved to the quality department due to shortage of manpower. Also, he could not operate the machine with the same effectiveness as he used to do before the accident.

Though he is now posted in quality department where he does not have to operate the machine, he still faces challenges in his work, as he is unable to grip any heavy material. He cannot hold the spare part in his injured hand properly.

It took around three months for his hand to heal; he was compensated for this period of absence by the ESI. In addition, he is also getting disability benefits from ESI.

Santosh feels there is no harm in working in the same factory as he has enough experience and has learnt enough to work in other departments. He is not thinking of any other alternative. He shared that due to his injury, he may not find any other job and also he doesn't have much time to look for other jobs.

19.16 Case Study # 16 – Yashbir

Background

Yashbir, 36 year old, belongs to Kapdivas near Dharuhera. After completing class 12, he did diploma in a Turner course from ITI. He is the only son in his family and is the primary breadwinner of his family. His family consists of his parents, wife and 2 children. His father is quite old and can't work.

Training

Due to his ITI background, Yashbir was quite familiar with the work when he joined. He works in tier-1 factory and all workers are trained on safety as soon as they join the factory. Training is conducted once every six months.

The factory always prefers to hire qualified ITIs and experienced people. After recruitment, short-term training is conducted for the new employees by the factory supervisors, telling them how to operate the machine.

Safety Measures

The factory takes good care of the workers. Apart from periodic safety trainings, the supervisors undertake regular inspections and also monitor worker's compliance with safety guidelines and protocols. Those who deviate from safety protocol are suitably reprimanded as per factory policies.

Every worker is mandated to wear goggles, gloves, masks, safety shoes and caps while working and on the factory premises. The factory doesn't compromise on safety and replacement of safety gear is always provided without any delay.

Workers' Attitude and Work Pressure

Yashbir shared that workers are very careful about their safety. They make sure they follow all the safety practices. The workers also take responsibility towards adherence to safety guidelines and wear shoes, gloves, mask etc., depending on what the current task requires.

There is no work pressure; workers are aligned to work as per their shift. The workers are not forced to work extra hours, if the machine breaks down or the target for the day is not achieved. They just work within their shift hours.

The Accident

While removing an incorrectly loaded component, his had got stuck in the machine and Yashbir lost two fingers of his right hand.

Medical Treatment

A doctor and first aid services are available on the factory premises. After the accident, due to severity of the injury, his co-workers took him immediately to the ESI hospital. But, Yashbir was not at all satisfied with the treatment he was given at the ESI. He shared that the ESI staff wasted around 40-45 minutes to start the treatment. He said that his finger could have been saved if they would have taken him to a private hospital.

Before starting the treatment the doctors at ESI hospital told him that if they tried to rejoin his fingers, he would face a number of problems in the future and Yashbir was asked to give his written consent for operation for legal reasons.

Frequency of Accident

Yashbir shared that not too many accidents occur in their factory but a few have happened in the past. He could recall two severe accidents that took place in the factory. In one, the concerned worker lost all his fingers; & in the second, the worker lost one eye as the drill equipment slipped from the case he was holding, bounced back and hit his eye

He shared that the risk is quite low if one follows all the safety measures but few accidents do take place.

Response of Employer

The employer treated him well as he was on the factory's payroll when the accident happened. Yashbir shared that if he would have been on the contractor's payroll, the factory would not have treated him as well as they did and would have asked him to leave. He shared a case when a contractual employee suffered a workplace accident in his factory and was neither made permanent nor provided any additional support during the post accident phase.

Impact and Way forward

Yashbir faces problem with his everyday work. He is unable to work continuously for long hours and his hands starts to hurt. Since the accident, he is also receiving permanent disability benefits from ESI.

The union has assured him of his job. He does not plan to switch companies now, as he is satisfied with his work and work environment.

19.17 Case Study # 17 - Dushrath

Background

23 years old Dushrath belongs to Mathura, UP and is based in Manesar for past six years. Dushrath's family consists of his parents, three brothers and three sisters. Two of his brothers are also working with him in the same factory. When Dushrath and his brother's were unable to find good jobs in and around Mathura, Dushrath's uncle, who work's in the same factory suggested him to migrate to the city along with his brothers. His father has given the farms on rent and gets a share of grains in return.

Training

There is no formal training on safety measures or even running the machines. The workers learn while they support the experienced workers during the initial days as a helper. "If the operator is running the machine incorrectly, we mimic him and get things done the wrong way as well. Who will tell us the right way of running the machine?" shared Dushrath.

The contractor shared that regular training used to be provided on the shop floor earlier but was stopped as the training process was often noisy and disturbing for other workers. He also stated that a new person is much more likely to have an accident as, in absence of any training, it actually takes few years before the worker can operate the machine with full confidence and sound knowledge.

Safety Measures

A representative from the HR department visits the shop floor periodically and explains the importance of safety measures such as identification of dangerous objects, ways to control shop floor fire accidents etc. The workers are instructed not to work in the absence of safety equipment.

All workers get a leather apron, eye cover and safety shoes. In case the apron and shoes get damaged, a new set is issued without delay. However an amount of Rs 480 (USD 8) is deducted from the salary of the worker. A new pair of gloves is issued to each worker every day. However, replacement is not provided if their gloves are damaged on the same day. Even while working overtime they get one pair only. The gloves tear in 4-5 hours, as the parts the workers handle are hot and have sharp edges. Gloves are given only to the workers doing manual welding and not robotic welding; even though workers who weld on robotic machines also have to weld manually at times.

Workers' Attitude and Work Pressure

Even though mobile phones are banned on the factory premises during working hours, many workers keep mobile phones with them to listen to songs. This is more prevalent during night shifts, when the inspections are less and often pose a security hazard due to lapse in concentration.

Supervisors are least concerned towards worker safety or compliances with safety guidelines and their primary concern is timely achievement of production targets. Dushrath says that he never feels pressurized but the newcomers in the factory are often pressurized by the supervisor's to increase their efficiency and work speed. Also, the factory owners regularly threaten the workers to close down the production line, if they suffer a loss because of slow production.

The contractor shared that the workers work in a hurry. If the machine breaks down, it takes some time before the same can be repaired. This results in extended working

hours, as the workers are mandated to complete their targets before they leave.

The Accident

No sensor was installed on the machine on which Dushrath was working. The maintenance team had removed the sensor during an earlier malfunctioning of the machine. Because of non-availability of sensor, upper clamp was not working properly. Dushrath informed the maintenance team about the same. The team checked and repaired the machine and assured him that sensors have been fixed. After that he took 4 to 5 pieces from the machine. At around 7th or 8th piece, the clamp came down on its own and Dushrath lost thumb of his right hand.

Medical Treatment

Immediately after the accident, factory engineer, contractor & supervisor took him to a nearby private hospital. The supervisor left as soon as Dushrath received the outpatient token from the registration desk at the hospital. The contractor dropped him home after the initial treatment was provided at the hospital. The next morning he went to the ESI hospital all by himself and they told him that factory's stamp was missing from his ESI card so the card was not valid. He asked them for an X-ray, but they refused to do anything without a proper card.

Frequency of Accident

Dushrath could recall one similar accident in his factory. He informed that a person from the maintenance department was injured while repairing the machine and his fingers.

Response of Employer

There is no system of leave in the factory for workers. He won't receive any salary from the factory or the contractor for the duration of missed workdays due to accident. Also, after a few days Dushrath was asked to join back, even before the bandages were removed. He has been working as a helper since then.

Impact and Way forward

The factory has already asked Dushrath to join back. According to him the factory values him as an employee. He also said that every factory is the same and it doesn't make any sense for him to change the firm or line of work. The other three members of his family are also working and according to him the accident won't have much of an impact on their overall financial condition.

"The accident won't have much effect on the family and we can easily manage for 3-4 months. But, I am worried what will happen if it takes me more time to get back to work."

19.18 Case Study # 18 - Indrajeet

Background

23-year-old Indrajeet belongs to Gorakhpur. He stays in Gurgaon with his father who works in a factory in Bawal. All the other family members stay in village. He is the eldest of all his siblings; his younger siblings are studying. After finishing high school and ITI, he joined his current factory in Bawal two years back. His father was already working here therefore it was not very difficult for him to come here and find a job.

Training

He has completed ITI and was familiar with the work in this industry. He was trained for about 1 year on how to make the die. However, in sync with the industry norms and practice, he joined the factory as a helper. He said "I am a quick learner and learned to handle heavy machinery in a short period of time."

Safety training is also given at their factory wherein they are told about how to handle the machines carefully.

Safety Measures

Indrajeet shared that workers are given training on safety measures wherein they are told how to operate the machine, how to clean the machine parts and how to avoid accidents and delays in work. Indrajeet worked on the Lathe machine and shared "There are no gloves required while working on that machine because wearing gloves may lead to accident." Shoes are mandatory.

There is no protocol for machine / safety inspections in the factory. Indrajeet has been working at this factory for the last three years and has not witnessed any shop floor inspection till date. He also suggested that the maintenance team was extremely careless and they often neglect worker complaints.

Workers' Attitude and Work Pressure

Workers are made accountable towards their own compliances to safety and also for their co-workers on the work-floor.

There is no pressure on the workers from supervisors or the management to work fast and complete proposed targets during a particular shift. Their shifts are for 8 hours; the workers come do the work within the shift and then leave. Indrajeet shared that the workers are hardly ever asked to work overtime.

Lunch and tea breaks are provided to all workers at fixed intervals. However, there is no system of leave apart from the weekly off on Sundays.

The Accident

Indrajeet was working on a machine that had sub standard brakes. He had informed the maintenance team about the delay in brake application but they ignored his concerns. While working, he wasn't able to apply the breaks and lost control of the machine. This resulted in loss of thumb of left hand.

Medical Treatment

Indrajeet was taken to a private hospital in Rewari after the accident happened; the doctors cleaned and bandaged the wound. He was then taken to a well-known private hospital in New Delhi. The HR personnel from the factory accompanied him to the private hospital. He was admitted to the hospital for seven days and the cost of the

treatment was borne by the employer. Indrajeet shared that the employers were reluctant to pay the bill amount of Rs. 2 lakhs (USD 3000) and after clearing the bills; Indrajeet was transferred to an ESI hospital.

Even after so many years of work, Indrajeet still has only a temporary ESI card. He still has not got a permanent ESI card and thus is facing difficulties in getting full benefits.

Frequency of Accident

According to Indrajeet, his was the first severe case that has ever happened in his factory. Such accidents do not happen frequently. However, minor injuries such as cuts and small lacerations are a common occurrence.

“The workers have to work on machines and tools every day, therefore minor injuries are quite common and they are bound to happen.”

Response of Employer

Apart from the bills paid by the employer for his treatment, no other financial support was provided to Indrajeet. The factory representatives were with him till his treatment was underway at the private hospital in Delhi. But, after he was referred to ESI hospital, nobody accompanied him or followed up with him on a later date. Now, Indrajeet independently visits ESI hospital for treatment as well as leave approval.

Impact and Way forward

The thumb of his left hand has been severed completely. He is worried and is not sure if he would be able to work at the same capacity again. He is worried that, if he is unable to work properly, no other factory will recruit him. He wants to stay with this factory because the accident has happened here, at least the factory will be considerate towards his circumstances and retain him.

After the accident the entire responsibility of the family is on his father. They may not be able to sustain, on one salary if Indrajeet continues to remain jobless for few more months.

19.19 Case Study # 19 – Manoj

Background

Manoj is 25 years of age and belongs to Bulandsheher, Uttar Pradesh. He works as a machine operator in a tier-3 automotive factory and earns a monthly salary of Rs. 6,200 (USD 100). He has a joint family that includes his wife, one child, father, mother and 2 younger brothers. His father takes care of the farm, one of his brother works as a driver in his village and another one has joined Indian army.

Training

When Manoj joined the factory, he was provided training on the machine that he would later operate. Manoj said that the factory also provides safety training to all the employees at the time of joining. They train people on how to clean the machine for maintenance, how to operate it, how to remove the scrap from the machine etc.

Safety Measures

The workers are asked to wear safety equipment while working on the machine. Safety gear is provided whenever required without any delay.

There is regular inspection by the supervisor and engineers of the factory. If someone is not wearing gloves or a mask he is reprimanded. In case of damage, they replace the safety gear immediately. Supervisors have also been instructed to censure the people who do not follow safety practices, such as not wearing safety gear. They make the workers understand the importance of wearing the same, but if someone still doesn't follow, they are given a verbal warning. However, the factory doesn't have the provision for any other punitive measures on these grounds.

Workers' Attitude and Work Pressure

At the beginning of the shift, the workers are told about the target of the day; it is up to them if they want to complete it in two hours or take a whole day for the same. But, some of the workers rush to complete their targets ahead of time and then take the rest of the day off. While working in a rush, they tend to be negligent towards safety, which at times results in an accident.

The Accident

One day while working on the machine, Manoj neglected the safety aspects and tired to work too fast to complete his targets ahead of time. This resulted in negligence on his part and his hand came in the machine. Manoj suffered multiple fractures on fingers and nerve damage.

Medical Treatment

Manoj was taken to a small private hospital after the accident. He was not taken to ESI hospital on the presumption that the process at the ESI hospital is time consuming and inefficient.

His initial treatment was completed at the small private hospital but due to absence of an orthopedician, he was transferred to a well-known private hospital in Gurgaon for further treatment and follow up. He visits ESI hospital only for approval of leave from the medical officer.

Manoj has recovered from this accident and the doctors have advised him to consult a physiotherapist to regain proper hand movement.

Frequency of Accident

Manoj shared that accidents do not happen very frequently. According to him, even if the accident happens, it happens due to carelessness and negligence of the workers.

Response of Employer

The factory is quite concerned about the workers' safety. The employers took Manoj to a small private hospital in their own car. They also reach out to him from time to time to check the progress of his treatment. An engineer from the factory always accompanies him to the ESI hospital. However, no monetary support has been provided to him.

Impact and Way forward

Post accident, he is experiencing reduced flexibility and movement in his hand. The doctors have also not assured him if he will be able to work on the machine again after recovery. But he feels that he will be able to work after some time.

He stays in a joint family therefore he can rely upon his father and brothers for support. He will move back to the same job, as he feels that the accident happened due to misfortune. He is sure that the factory will not have any issue in taking him back to work. He is also very comfortable with the work environment.

19.20 Case Study # 20 - Devender

Background

Devender is 23 years old and belongs to Rewari, a small town around 40 kms away from Manesar. He stays in a joint family with his mother, brother, sister-in-law and their children. He travels everyday to Manesar for work. Devender is not educationally qualified for skilled jobs and therefore joined a tier-2 auto-component manufacturing factory.

Training

Devender said that the workers are given proper training before they start operating the machine. An untrained person is not allowed to operate the machine at all. Once the supervisor's are confident of the worker's ability to operate the machine, only then the workers are allowed to operate independently.

When Devender joined, he used to look after the store and was not given any training on the machine. Gradually when they realized that he is capable of operating the machine, they trained him first and then allowed him to work on the machines. The one-month training focused on how to fix the die and how to use the same.

Safety Measures

Devender shared that floor inspection is done on daily basis by the supervisors. There is a separate team for inspection. If they find anybody not wearing gloves or following the safety measures, they reprimand that person.

Gloves are provided to all the workers well in advance. Lost or damaged gloves are replaced quickly with brand new ones. Some of the workers sometimes wear two gloves for protection. The factory is concerned about the safety of its workers.

Workers' Attitude and Work Pressure

All the workers in Devender's factory are very careful about their safety and follow all the safety measures meticulously. Devender shared that they do not give any chance for the supervisor to come and berate them for being obtuse of safety. Along with their own safety, the workers take care of their co-workers as well; they themselves admonish their more carefree co-workers and make them follow the guidelines set by the factory.

The factory is quite flexible and does not pressurize workers to finish the job quickly. Devender's shift is for 8 hours. He shared that every day he reached the factory at 9 am and left at 5.30 pm. Lunch and tea breaks are provided to all the workers. He said that the co-workers and supervisors are also very cooperative.

"You can go for a bath for 15 minutes after shutting down the machine. No one says anything. Sometimes we go outside to smoke as well."

Devender shared "The factory is very good. There are no issues. Last time, I had some pain in my leg and I couldn't work for two weeks. I used to go to the factory and sit there. After my leg recovered, they just asked me if I could work, I said yes and started working again."

The Accident

Devender was changing the die in the machine. While replacing the die in the aligner, he was a little careless and casual in his approach. This resulted in two dies to collide

with each other and his thumb was caught in the collision. He fractured his thumb in that accident.

Medical Treatment

Devender's treatment was administered in a private hospital. After the accident, he was taken directly to a private hospital, as he did not have an ESI card. He said that the factory was earlier willing to give him the card but he didn't take it. He never knew that he would someday require it. He took the card after the accident. His treatment was done in a private hospital for 15 days. Now, he has got the temporary ESI card and he goes to ESI for change of bandages.

He is quite satisfied with the medical care dispensed by ESI and the private hospital.

Frequency of Accident

According to Devender, such cases do not happen very frequently in the factory. The machines are fully automatic; the workers only have to put metal into the machine, press a button and examine the finished component. Accidents occur only when a worker is negligent.

He also said that small accidents do take place when the workers try to answer their cell phones while at work. However, these injuries are very minor, he said.

Response of Employer

Devender's employer is very cooperative and concerned about workers' safety. Since his accident, the factory has assigned a person to help him. His hand is injured and he is unable to drive his bike. The employer has asked one person to be with him and help him travel from one place to another. The factory has ensured that he gets the care he requires to get back on his feet and rejoin work.

The contractor as well as the employer has guided Devender and the other workers about the process of getting a permanent ESI card.

Impact and Way forward

Devender is sure that his thumb will heal soon and he would be able to work at full efficiency. He doesn't believe that the injury will impact his skills in the near future. He has cattle as well as farms of his own in his village. His family earns around Rs. 25000 (USD 415) per month by selling milk and owns around 2 acres of land. They grow mustard. Devender said if he has to leave this job, he would go back and take care of his cattle and farms.

Wall of Donors

Arminster Thind
Ashish Ranjan
Balaji Krishnamurthy
Chitra Sundaram
Kalpana Melvani
Meeta Sandeep
Nirali Shah
Pankaj Tangri
Parimal Bardhan
Prabhat Agarwal
Priyanka Kumar
Rahul Aggarwal
Raj Janagam
Raja V
Rajiv Sachdeva
Rajnish Dhall
Ravi Gulati
Ritika Agarwal
Darshan Bhat
Sandeep Sachdeva
Sangeeta Bhatia
Sanjay Khatter
Seshu Kumar
Siddhesh Jere
Sidin Vadukut
Stephen Murdoch
Sunny Narang
VS (Anonymous)
Vinay Dixit
Vinayak Aggarwal



www.agrasar.com

www.safeinindia.org

**Accidents in the Automobile Industry in Gurgaon:
Case Studies and Stakeholder Response
A SafeInIndia - Agrasar Research**