

# EHS Technical Newsletter - Incident Analysis Techniques

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## FACTS - WORKPLACE INJURY



Every 7 seconds... a worker is injured on the job

**104,000,000**

Production days lost due to work-related injuries



Total in 2018  
**\$170.8 Billion**

## Top 3 workplace injuries resulting in lost work days



Overexertion  
(33.54%)



Contact with  
object & equipment (26%)



Slip Trip Fall  
(25.8%)



Cost per death  
**\$11,90,000**



Cost per medically  
consulted injury  
**\$41,000**

## INDIA FACTS - Factory Accident (year 2014-2016)

**3**

Every day 3 death  
in accident

**47**

Every day 47 workers  
are injured

**3,562**

Total death

**51,124**

Total Injuries

**33,000**

65% of total injuries are from  
West Bengal

Incident analysis is performed to avoid reoccurrence of same event. Following correct approach of incident analysis helps to identify right contributing and causal factor of an event.

<b>Response to Incident</b>	Stop incident Inform ERT	Collect evidences Keep people away	Notify management team Start investigation within 24-48 hr
<b>What is needed for incident analysis?</b>	Records e.g. Preventive maintenance Field notes & evidences	Equipment document e.g. lifting plan, manual Camera	Subject matter expert Conducting interviews
<b>Incident analysis team</b>	Maintenance representative Keep incident analysis team to 5-7 members	Person involved in injury EHS team member	Department Supervisor Person with ioperation/ equipment knowledge
<b>Who should be interviewed?</b>	All involved Co-worker	Emergency response team Medical personnel	Supervisor Maintenance team
<b>Interviewing Skills</b>	- Make witness comfortable to give you fact about incident - Avoid Yes/No Answer. E.g. Did you follow required SOP, use machine guard and wear PPE during operation? Rather ask Can you please give detail of safety precautions taken during operation? - Be a good listener - Agree on uniform language - Do not play the blame game		
<b>Incident Analysis Method</b>	<b>5Whys</b> - Simple tool which helps to determine the cause-effect relationship <b>Event &amp; Causal Factors Analysis</b> - describes the necessary and sufficient events and causal factors for accident occurrence in a logical sequence		
<b>Where to look for an improvement</b>	Work environment Equipment	Policy change SOP/Procedure update	People (training, qualification, workload reduction, stress, etc)
<b>Writing Corrective action</b>	Identify Causal and contributing factors of incident and develop your corrective actions <b>Contributing factor</b> - Employee did not use the guard <b>Causal factor</b> - Reason behind not using machine guard		

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<b>References for injury data in news letter</b>	<p>www.nsc.org for Facts, cost &amp; Top 3 lost workdays injury</p> <p>India Facts - Labour and Employment Ministry India</p> <p>Click on subject head of respective tab for detail data review</p>
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### Our Past Training Detail

<b>Incident Analysis Techniques</b>	<p>2 sessions. First for heavy engineering company &amp; 2nd for participants from various industries</p> <p>Total 63 Participants</p> <p>70% of participants from operation</p>	<p>On scale of 1-4, 95% participants rated 4-Very good &amp; 5% with 3-Good</p>
<b>Key Elements of IH Program</b>	<p>100+ registration &amp; 85% turn out</p> <p>3 sessions of 2 hours each in 2 days</p>	<p>On scale of 1-4, 95% participants rated 4-Very good &amp; 5% with 3-Good</p>

### Our Upcoming Online Training

<b>BOHS-OHTA Approved training</b>	<p>W 201 Basic Principles of Occupational Hygiene Jun 6-11, 2020 <a href="#">Link</a></p> <p>W 506 Ergonomics Essentials Jul 4-8, 2020 <a href="#">Link</a></p> <p>W 507 Health Effects of Hazardous Substances Jun 6-11, 2020 <a href="#">Link</a></p>
<b>CIH Exam Preparation Classes</b>	<p>16 Sessions Weekend classes 23-May to 26-Jul</p> <p>2 hours each Post training assignment 1 day revision before exam <a href="#">Link</a></p>