



2015 IPLOCA H&S Statistics report

Message from the HSE Committee

Based on submissions received from our members, 2015 has been a very bad year in terms of health & safety for the pipeline industry. After four years of an encouraging decrease in the number of fatalities on our work sites, we have experienced a huge increase during this past year, more than doubling the historical low of 2014, while the number of worked hours only increased slightly. Why do we still have so many fatalities on our work sites? Leadership is a key element of safety. The IPLOCA HSE Committee strongly encourages members' top management to study in detail what happened last year, and to take appropriate measures to inject and support a "zero fatality" safety culture in their company.

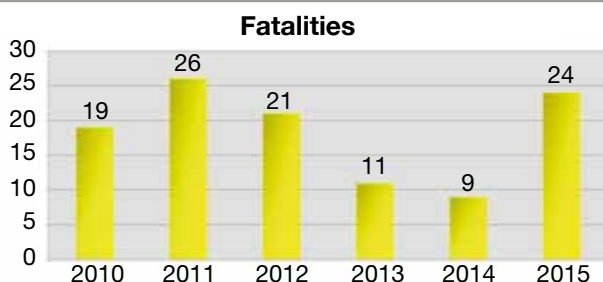
The Key Performance Indicators (KPI) objectives set in November 2014 for the year 2015 (no fatality and TRIR lower than 3) have partially been met, with an overall TRIR of 2,84. However, this cannot be satisfactory: the TRIR has increased, and fatalities are frighteningly high and very far from the objective.

The HSE Committee, fully supported by the IPLOCA Board of Directors has decided to use a new set of KPI and adopt long term objectives for 2020:

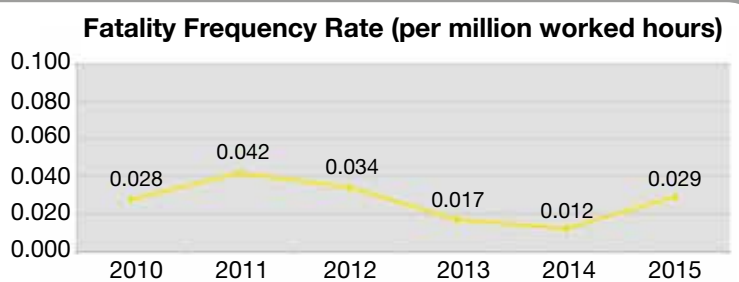
- Lagging indicators : ZERO fatalities and TRIR less than 1
- Leading indicators : Minimum 30 000 recorded near misses and training rate more than 15 000 hours per million worked hours

To help members to reach these objectives, the IPLOCA HSE Committee has organised five safety workshops, has created an online platform to share safety experiences, and will continue to develop new initiatives in the coming years. Members' participation and contribution are essential for the success of these initiatives.

Lagging Indicators

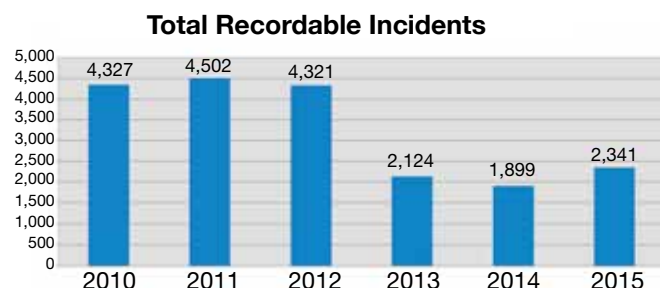


A fatality is a death resulting from a work injury or occupational illness, regardless of the time intervening between injury and death.

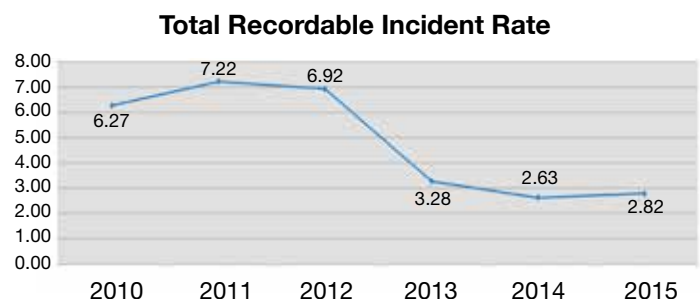


Fatalities Frequency Rate:

$$\frac{\text{number of fatalities} \times 1'000'000}{\text{total worked hours}}$$



Total Recordable Incident cases are calculated with number of Lost Time Injuries (LTI), Medical Treatment Cases (MTC) and Restricted Work Cases (RWC).

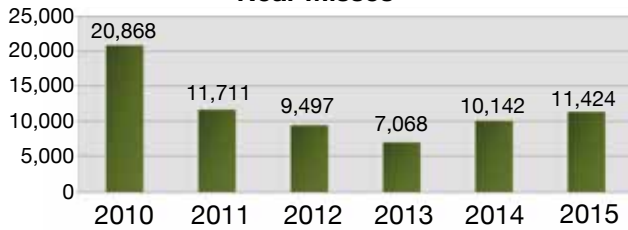


TRIR:

$$\frac{\text{number of TRI} \times 1'000'000}{\text{total worked hours}}$$

Leading Indicators

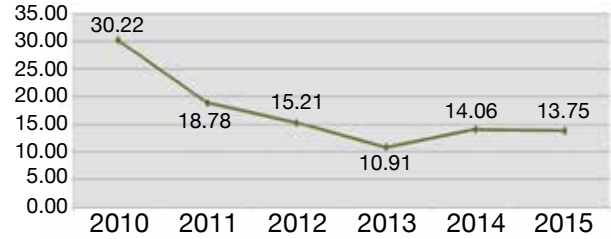
Near Misses



Near Miss: Any event which had the potential to cause injury and / or damage and / or loss but which was avoided by circumstances.

The term "incident" includes "near misses."

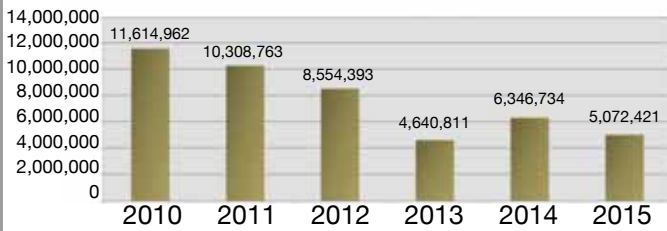
NM Frequency Rate (per million worked hours)



Near Misses Frequency Rate:

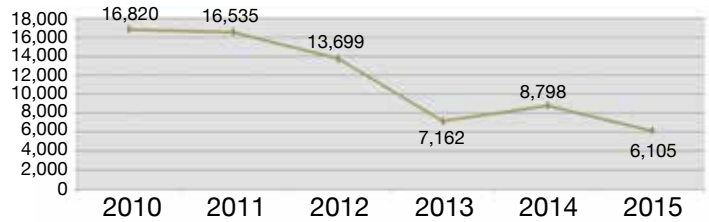
$$\frac{\text{number of NM} \times 1'000'000}{\text{total worked hours}}$$

H&S Training Hours



H&S Training Hours are the number of worked-hours spent by personnel to get trained to health & safety standards (includes all the hours spent by all the personnel to get trained).

H&S Training Rate (per million worked hours)



H&S Training Rate:

$$\frac{\text{number of H\&S training hours} \times 1'000'000}{\text{total worked hours}}$$

IPLOCA H&S Commitment

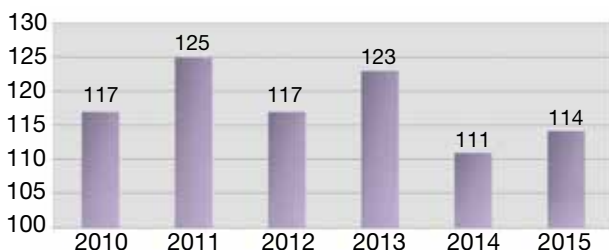
IPLOCA is totally committed to the promotion of health and safety in all areas of its influence and subscribes to the philosophy that all accidents are preventable. Therefore IPLOCA encourages all member organisations to implement the most efficient health and safety measures applicable to their activities.

As a condition of membership, Regular Members are required to submit their annual health & safety statistics to IPLOCA, such that aggregate statistics for the industry can be monitored.

All our members have to abide by the IPLOCA Occupational Health and Safety Philosophy:

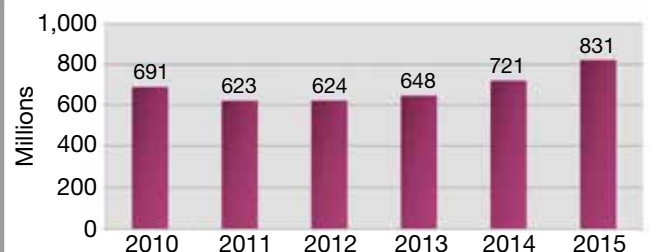
- As an IPLOCA member, we are committed to the Occupational Health and Safety of our people
- We believe that all incidents and accidents are avoidable
- We believe that leadership is the key for successful Occupational Health and Safety
- We believe that everyone is responsible for Occupational Health and Safety

Number of Submissions



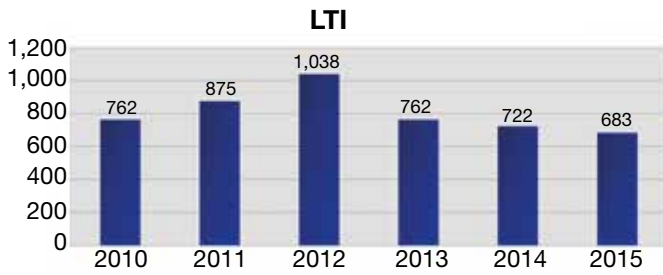
The 2015 IPLOCA Health & Safety statistics were derived from data provided by 101 Regular Members (95% of total Regular Membership), and 13 Associate Members.

Worked Hours (inclusive of overtime)



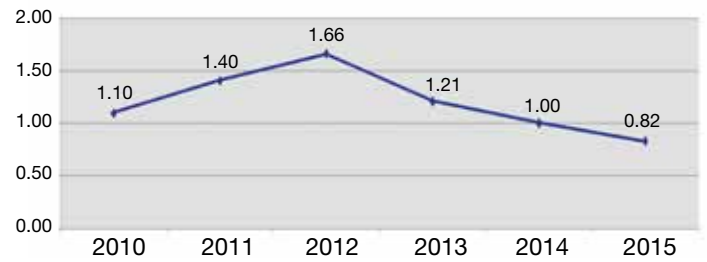
The number of hours worked during which the employee is present in the work environment as a condition of his or her employment, plus the extra hours put in as overtime.

Lost Time Injury Cases (LTI)



Lost Time Injuries are the sum of fatalities, permanent total disabilities, permanent partial disabilities and lost workday cases. **NB:** if in a single accident 20 personnel receive Lost Time Injuries, then it is accounted for corporate reporting purposes as 20 LTIs (not 1 LTI).

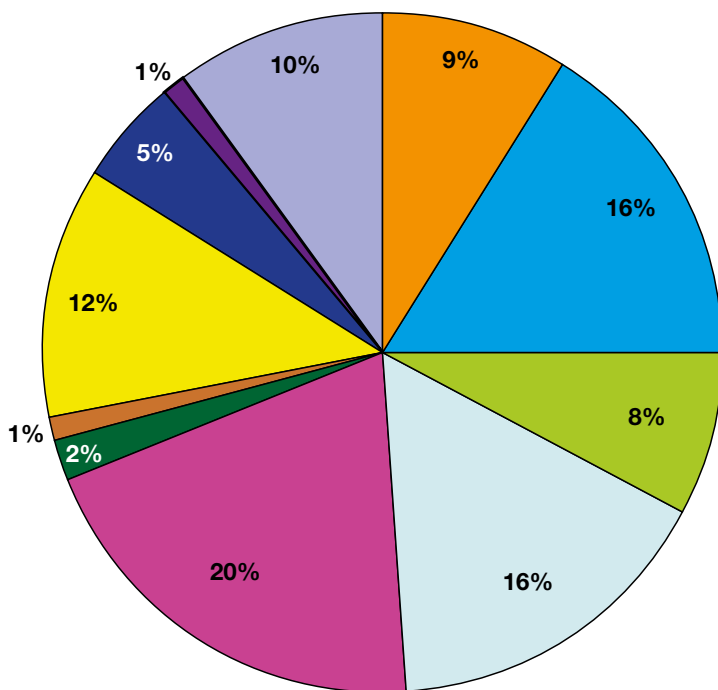
LTI Frequency Rate (per million worked hours)



LTI Frequency Rate:

$$\frac{\text{number of LTI} \times 1'000'000}{\text{total worked hours}}$$

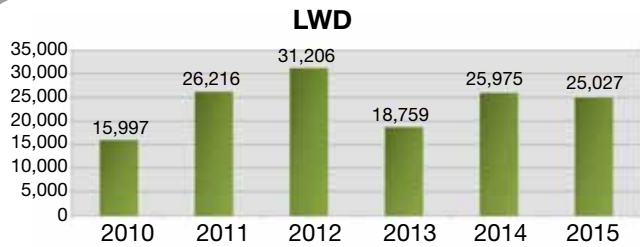
Split of LTI



- **Vehicle accident**
Accident involving one or more moving vehicles which results in death or injury.
- **Lifting operations**
Accident resulting from the use of a lifting machine, including but not limited to falling objects, collision with obstacles, breaking of machinery, etc.
- **Working at height / scaffolding**
Accident as a direct result of working at height (higher than waist level above the surrounding grade level or surface), on cranes, scaffolding, ladders etc.
- **Hand tools**
Accident as a direct result of the use of hand tools and portable hand held equipment, including but not limited to the use of all powered or non-powered hand-held tools, e.g. screw driver, wrench, grinder, hammer, chisel, welding tools, saw, drill machine, blow torch, etc.

- **Involving slips, trips and falls**
Accident as a direct result of a fall due to a slip or loss of stability.
- **Excavation/earth collapse**
Accident as a direct result of any kind of earth moving operation, be it by hand or with machines or explosives.
- **Confined spaces**
Accident resulting from a limited working space.
- **Impact with construction equipment**
Accident as a direct result of operating a piece of construction equipment or machinery including, but not limited to, pumps, compressors, mixers, turbines, boilers, cranes, earth moving equipment, etc.
- **Welding operations**
Accident occurring as a consequence of welding operations, including but not limited to arc burns.
- **Hazardous substances**
Accident occurring when processing, handling, storing or transporting hazardous or toxic substances.
- **Other**
Accident that cannot be logically classified under any category above.

Lost Work Days (LWD)



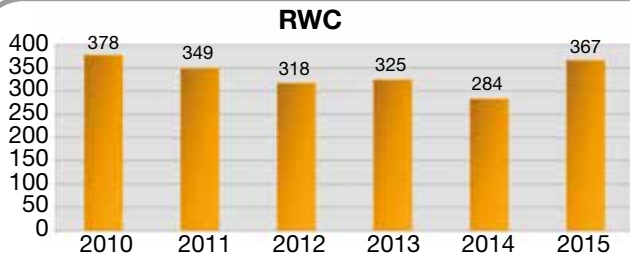
Lost Work Days are the sum of calendar days lost as a result of a work-related accident.

LWD Severity Rate (per million worked hours)



$$\text{LWD Severity Rate} = \frac{\text{number of LWD} \times 1'000'000}{\text{total worked hours}}$$

Restricted Work Cases (RWC)



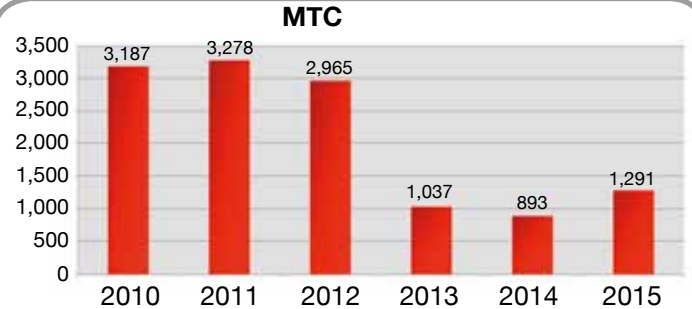
A Restricted Work Case is any work injury, which results in an employee not being able to conduct normal duties, after the day the incident occurred.

RWC Frequency Rate (per million worked hours)



$$\text{RWC Frequency Rate} = \frac{\text{number of RWC} \times 1'000'000}{\text{total worked hours}}$$

Medical Treatment Cases (MTC)



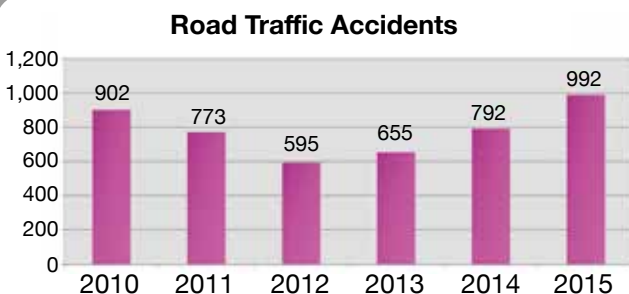
A medical treatment case is work related injury requiring medical treatment beyond first aid by a physician or other licensed health care professional; or an illness diagnosed as work related by a physician or other licensed health care professional; exclusive of any resulting in a fatality or those meeting the definitions of an LTI or RWC.

MTC Frequency Rate (per million worked hours)



$$\text{MTC Frequency Rate} = \frac{\text{number of MTC} \times 1'000'000}{\text{total worked hours}}$$

Road Traffic Incidents / Accidents



A road traffic incident/accident is any incident involving one or more moving vehicles which results in injuries and/or damage to property, vehicle(s) or loads being moved or carried by vehicles. Incidents during travel from camp, home or any other location to and back from the worksite should be included.

RTA Frequency Rate (per million worked hours)



$$\text{RTA Frequency Rate} = \frac{\text{number of RTA} \times 1'000'000}{\text{total worked hours}}$$

Disclaimer

Whilst every effort has been made to ensure the accuracy of the information contained in this publication, neither IPLOCA nor any of its members past, present or future warrants its accuracy nor will they, regardless of its or their negligence, assume liability for any foreseeable or unforeseeable use made thereof, which liability is hereby excluded. Consequently, such use is at the recipient's own risk on the basis that any use by the recipient constitutes agreement to the terms of this disclaimer. The recipient is obliged to inform any subsequent recipient of such terms.