

# IADC stats: Industry reaches record-low LTI rate in '05 despite 10% increase in manhours

## But more work remains to be done as drilling contractors report 23 fatalities last year

**DESPITE A 10%** increase in reported drilling manhours worldwide in 2005, the industry reached a record-low Lost Time Incidence rate, according to recently released results from IADC's Accident Statistics Program.

"Drilling contractors should really be commended for this impressive accomplishment," said **Joe Hurt**, IADC Director-Land Operations, who oversaw the compilation of the 2005 data.

The data are compiled annually from drilling contractors worldwide. During 2005, 105 drilling contractors representing approximately 78% of the worldwide oil and gas well drilling rig fleet participated in IADC's ASP. The results published here are based on incidence rates, which are calculated on incidents per 200,000 manhours.

Data showed that the drilling industry's LTI rate dropped from 0.63 in 2004 to 0.60 in 2005, a 5% reduction, even though total reported manhours increased from 336.12 million to 369.56 million. A total of 1,077 LTIs were reported. This also translates into a 23-fold improvement from the industry's performance in 1963, when the LTI rate per 100 workers was more than 14.00.

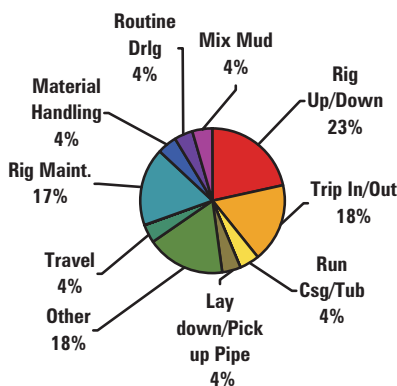
### 23 FATALITIES REPORTED

Of course, this does not mean the work is done.

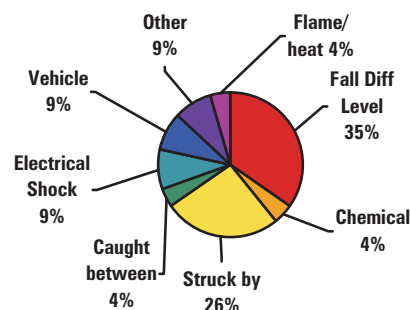
The industry also lost ground slightly with recordable incidence rates, which rose 1% from 2004's 2.26 to 2005's 2.34. Additionally, a total of 23 fatalities were reported. That is 5 fewer than the year before. The 2005 fatality incidence rate was 0.011, compared with 0.017 in 2004.

According to the 2005 data, the largest percentage of fatalities occurred to employees with 1 to 5 years of service with the company. Ten of the victims had worked for the company for less than 1 year, with 6 of those 10 having fewer than 3 months of service. Nine workers had between 1 to 5 years, and 3 had worked

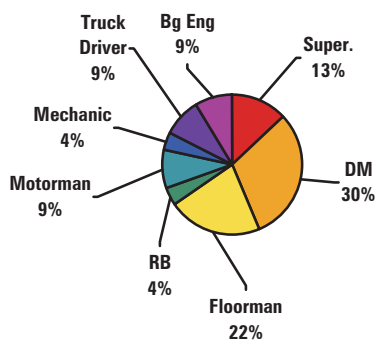
Fatal Incidents by activity



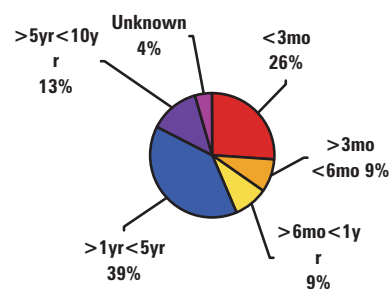
Fatal Incidents by type



Fatal Incidents by Position



Fatal Incidents by Time in Service



The drilling industry lost ground slightly with recordable incidence rates, which rose 1% from 2.26 in 2004 to 2.34 in 2005. A total of 23 fatalities were reported – 5 fewer than in 2004.

for the company for more than 5 years. Five fatalities occurred while rigging up/down, and rig repairs and tripping in/out had 4 fatalities each. Five of the fatalities were supervisors of driller or above, 7 were derrickmen, 5 were floormen, 2 truck drivers, 2 motormen, 1 mechanic and 1 roustabout.

### REGIONAL REPORTING

Safety data was compiled separately for land and offshore operations and for 7

geographic regions – US, Europe, Canada, Central and South America, Africa, the Middle East, and Asia Pacific. This is not intended to measure region against region but to provide each region with tools to measure their efforts and to make improvements.

Central/South American land operations had the lowest LTI rate of 0.20 while European land operations had the lowest recordable incidence rate of 1.00. Mideast offshore operations had the lowest LTI rate of 0.21 as well as the lowest recordable incidence rate of 0.79.

Contractors in Europe, both land and offshore, together worked more than 30.76 million manhours with no fatalities in 2005. European offshore accounted for 25.76 million manhours worked while land had 5.0 million manhours.

US land and offshore contractors worked more than 113.58 million manhours, with 10 fatalities in the land category and no fatalities in offshore. US land exceeded the offshore category in manhours: 75.37

million for land and 38.21 million for offshore.

Canadian contractors accounted for 5.4 million manhours and had 2 fatalities. The land category had 3.32 million manhours and 2 fatalities while offshore had 2.08 million manhours and no fatalities.

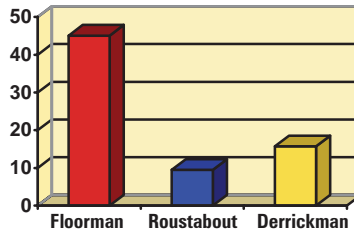
Central/South America accounted for 66.88 million manhours and no fatalities. Land operations reported 47.19 million manhours and for offshore, it was 19.69 million manhours.

Africa had a total of 36.74 million manhours and 1 fatality. Land accounted for 12.55 million manhours with no fatalities, and offshore operations had 24.19 million manhours and 1 fatality.

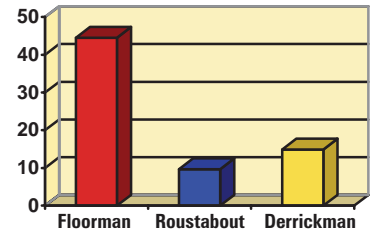
The Middle East region accounted for 69.23 million manhours with 6 fatalities. The land division had 51.15 million manhours and 4 fatalities, compared with 18.08 million manhours and 2 fatalities for the offshore division.

Contractors in Asia Pacific reported a total of 46.96 million manhours and 4 fatalities. Offshore had 32.08 million manhours and 3 fatalities, and land had 14.88 million manhours and 1 fatality.

**LTI by Occupation  
(Based on 1003 incidents)**

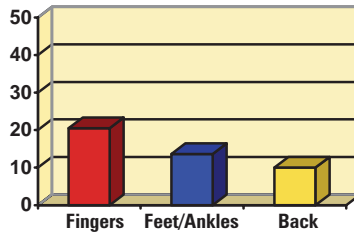


**REC by Occupation  
(Based on 4105 incidents)**

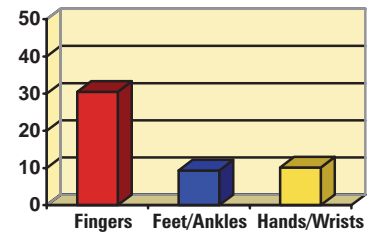


Above: Data from the IADC ASP show that of all the categories, as in previous years, the floorman position suffers the largest percentage of LTI and Recordable injuries. Below: Fingers remained the most vulnerable part of the body.

**LTI by Body Part  
(Based on 1006 incidents)**



**REC by Body Part  
(Based on 4129 incidents)**



**LTI, RECORDABLES**

Among US offshore workers, LTI rates improved 31% from 0.42 in 2004 to 0.29 in 2005. Their total recordable incidence

rate (REC) also improved by 11%, from 1.64 in 2004 to 1.46 in 2005.

US land workers saw their LTI rate improve 1%, from 1.62 in 2004 to 1.60

in 2005, but saw their REC worsen 14%, from 5.83 in 2004 to 6.64 in 2005.

European land workers' LTI rate improved a significant 54%, from 0.69 in 2004 to 0.32 in 2005, and their REC also improved 43% from 1.74 in 2004 to 1.00 in 2005.

European offshore workers' LTI rate, however, increased 22% from 0.37 in 2004 to 0.45 in 2005. Their REC also went up 4% from 1.20 in 2004 to 1.25 in 2005.

For Canadian land operations, the LTI rate was 1.21, which is a 34% improvement from 1.83 in 2004. Similarly, their REC improved 37% from 6.32 in 2004 to 3.98 in 2005.

For operations offshore Canada, the LTI rate increased 168%, from 0.25 in 2004 to 0.67 in 2005. Their REC, however, improved by 12%, from 2.29 in 2004 to 2.02 in 2005.

In Central/South America, land workers had an LTI rate of 0.20 in 2005, which is a 46% improvement over 0.37 in 2004. Slight improvement also was reported in REC: 1.16 in 2004 to 1.15 in 2005.

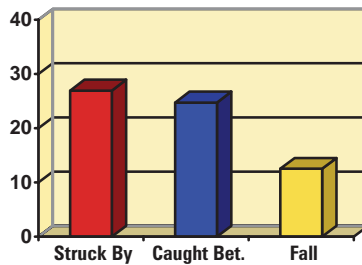
Offshore workers in Central/South America improved their LTI rate by 5%, from 0.39 in 2004 to 0.37 in 2005. Their REC improved 12% from 1.72 in 2004 to 1.51 in 2005.

In African land operations, the LTI rate increased by 4%, from 1.03 in 2004 to 1.07 in 2005. Their REC also increased, from 2.39 in 2004 to 2.68 in 2005, a 12% jump.

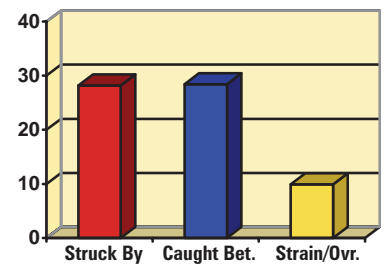
Workers offshore Africa had an LTI rate of 0.33 in 2005, an 18% increase from 0.28 in 2004. Their REC, however, showed some improvement: 18% from 1.19 in 2004 to 0.98 in 2005.

In Middle East land operations, the LTI rate stayed unchanged at 0.26 while the REC improved 2% from 1.09 in 2004 to 1.07 in 2005.

**LTI by Incident Type**  
(Based on 1006 incidents)

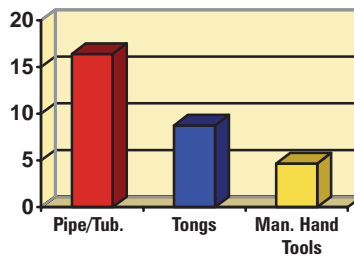


**REC by Incident Type**  
(Based on 4133 incidents)

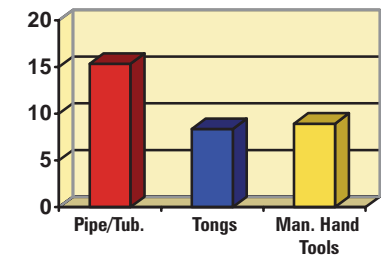


Above: Struck by and Caught between accounted for 51.69% of lost-time injuries and 56.6% of recordable injuries to drilling personnel in 2005. Below: "Pipes/collars/tubulars" is the equipment category responsible for the most lost time and recordable incidents..

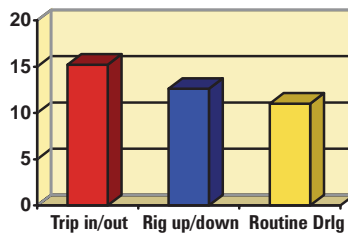
**LTI by Equipment**  
(Based on 1006 incidents)



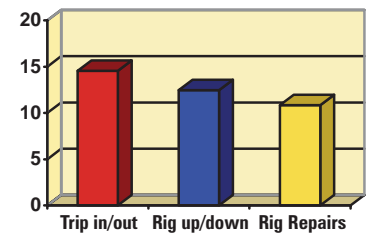
**REC by Equipment**  
(Based on 4134 incidents)



**LTI by Activity**  
(Based on 999 incidents)

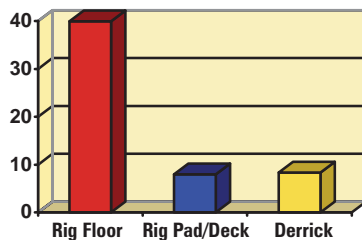


**REC by Activity**  
(Based on 4097 incidents)

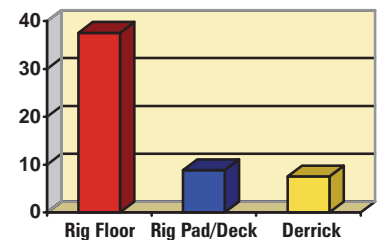


Above: "Tripping in/out" is the operation that involves the most lost time and recordable injuries. Below: It's not surprise that by far the most injuries in drilling operations occur on the rig floor.

**LTI by Location**  
(Based on 1006 incidents)



**REC by Location**  
(Based on 4133 incidents)



Middle East offshore operations saw their LTI rate worsen by 24%, from 0.17 in 2004 to 0.21 in 2005. Their REC also worsened slightly: 5% from 0.75 in 2004 to 0.79 in 2005.

Land workers in Asia Pacific saw their LTI rate worsen from 0.24 in 2004 to 0.34 in 2005, a 42% increase. Their REC improved 18%, from 1.51 in 2004 to 1.24 in 2005.

Offshore workers in Asia Pacific had a 0.30 LTI rate in 2005, a 3% increase from the 2004 rate of 0.29. Their REC dropped 8%, from 0.87 in 2004 to 0.80 in 2005.

In conclusion, the industry continues to see pressure on personnel as the rig fleet continues to grow. The growth is adding to safety concerns but also appears to be helping to bring sustained improvement in the industry's overall safety record. ■