Rig Move Hazards
by
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IADC Rig Moving Committee Meeting
July 18, 2013
National Oil & Gas Fatality Rate

Deaths per 100,000 Workers

1993 1995 1997 1999 2001 2003 2005 2007 2009

Oil and Gas Extraction
National Oil & Gas Fatality Rate

7 Times National Average

Deaths per 100,000 Workers

Oil and Gas Extraction

General Industry

1993 1995 1997 1999 2001 2003 2005 2007 2009

7 Times
National Oil & Gas Fatality Rate
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Deaths per 100,000 Workers

Oil and Gas Extraction
Active Rotary Drill Rigs
General Industry

Active Rotary Drill Rigs

1993 1995 1997 1999 2001 2003 2005 2007 2009

Deaths per 100,000 Workers

0 5 10 15 20 25 30 35 40

0 250 500 750 1000 1250 1500 1750 2000

OSHA® Occupational Safety and Health Administration
### FIGURE 1 — Leading Causes of Fatality by Company Type

**U.S. Oil and Gas Extraction Workers 2003-2009**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Operator 121 (18%)</th>
<th>Drilling Contractor 198 (31%)</th>
<th>Well Servicing Company 329 (51%)</th>
<th>All Company Types 648</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Highway Crash 29 (24%)</td>
<td>Struck by Object 52 (26%)</td>
<td>Highway Crash 120 (36%)</td>
<td>Highway Crash 190 (29%)</td>
</tr>
<tr>
<td>2</td>
<td>Struck by Object 19 (16%)</td>
<td>Highway Crash 41 (21%)</td>
<td>Struck by Object 60 (18%)</td>
<td>Struck by Object 131 (20%)</td>
</tr>
<tr>
<td>3</td>
<td>Aircraft 14 (12%)</td>
<td>Falls 28 (14%)</td>
<td>Explosion 34 (10%)</td>
<td>Explosion 53 (8%)</td>
</tr>
<tr>
<td>4</td>
<td>Fire 14 (12%)</td>
<td>Caught/compressed 17 (9%)</td>
<td>Caught/compressed 20 (6%)</td>
<td>Caught/Compressed 46 (7%)</td>
</tr>
<tr>
<td>5</td>
<td>Explosion 10 (8%)</td>
<td>Electrocution 13 (7%)</td>
<td>Fire 15 (5%)</td>
<td>Falls 45 (7%)</td>
</tr>
<tr>
<td>Other</td>
<td>35 (28%)</td>
<td>47 (23%)</td>
<td>80 (25%)</td>
<td>183 (29%)</td>
</tr>
</tbody>
</table>

*Fatal Injuries; Kyla Retzer & Ryan Hill; CDC NIOSH, Oil and Gas Extraction Safety and Health Program*
Wyoming Oil & Gas Fatalities by Event (2003 to 2012)

- Contact with Object & Equipment (struck, caught-in, pinned) – 50%
- Fall – 19%
- Fire or Explosion – 16%
Hazards Associated with Rig Moving

- Moving Vehicles
- Blind Spots
- Pinch points
- Weather
- Slips, Trips, & Falls
- Falls
- Lifting
- Forklifts
Hazards Associated with Rig Moving (cont’)

- Hand Tools
- Wire Ropes and Chains
- Over-Head Loads
- Over-Head Power Lines
- Truck Traffic
while the rig is being set up at the site, workers can get struck by a crane, load, truck, forklift, tool, etc.

it’s important that the worker is knowledgeable of the hazards present and is aware at all times of equipment around them
this worker is cutting through a bad spot while the truck is moving

Corrective Actions: never take chances like this when the space is this limited; wait until the truck parks
this opening can sneak up on a worker when walking backwards directing a load into position

Corrective Actions: place a cover over this opening
this is another example of a fall hazard

**Corrective Action:** cover the rest of the hole or cover entire hole with a larger grate
The sand was going to be transferred from truck to a portable holding tank called a “Sand King”
Well Servicing Fatality
(Employee was Electrocuted from Overhead Power Line)
Embrace SAFETY For Life!

Thank You

Any Questions?

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