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# IADC 2017 Middle East Water Totals (Table 1)

<table>
<thead>
<tr>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Man-hours</td>
<td>39,906,727</td>
</tr>
<tr>
<td>Total Medical Treatment Incidents</td>
<td>25</td>
</tr>
<tr>
<td>Total Restricted Work Incidents</td>
<td>31</td>
</tr>
<tr>
<td>Total Lost Time Incidents</td>
<td>12</td>
</tr>
<tr>
<td>Total Fatalities</td>
<td>0</td>
</tr>
<tr>
<td>Total Recordables</td>
<td>68</td>
</tr>
</tbody>
</table>

- **MTO Incidence Rate**: 0.13
- **RWC Incidence Rate**: 0.16
- **LTI Incidence Rate**: 0.06
- **LTI Frequency Rate**: 0.30
- **DART Incidence Rate**: 0.22
- **DART Frequency Rate**: 1.08
- **Recordable Incidence Rate**: 0.34
- **Recordable Frequency Rate**: 1.70

**Companies Reporting:** Water – 19

Medical Treatment Incidence Rate = MTOs X 200,000
Restricted Work Incidence Rate = RWCs X 200,000
Lost Time Incidence Rate = LTIs + FTLs X 200,000
DART Incidence Rate = LTIs + RWC X 200,000
Recordable Incidence Rate = RCRD X 200,000

Lost Time Frequency Rate = LTIs + FTLs X 1,000,000
DART Frequency Rate = LTIs + RWC X 1,000,000
Recordable Frequency Rate = RCRD X 1,000,000

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## Middle East Water Total Incidence Rates vs Man-hours (Figure 1)

![Graph showing incidence rates vs man-hours from 2001 to 2017]
IADC 2017 Middle East Water Charts
Middle East Water Total Lost Time Incidents by Month (Chart 1)
Based on 12 Incidents

- July: 25.00%
- October: 8.33%
- September: 8.33%
- August: 8.33%
- May: 8.33%
- April: 16.67%
- February: 8.33%
- January: 8.33%
- December: 8.33%
Middle East Water Total Recordable Incidents by Month (Chart 2)
Based on 67 Incidents

<table>
<thead>
<tr>
<th>Month</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>8.96%</td>
</tr>
<tr>
<td>February</td>
<td>4.48%</td>
</tr>
<tr>
<td>March</td>
<td>7.46%</td>
</tr>
<tr>
<td>April</td>
<td>11.94%</td>
</tr>
<tr>
<td>May</td>
<td>7.46%</td>
</tr>
<tr>
<td>June</td>
<td>7.46%</td>
</tr>
<tr>
<td>July</td>
<td>11.94%</td>
</tr>
<tr>
<td>August</td>
<td>8.96%</td>
</tr>
<tr>
<td>September</td>
<td>10.45%</td>
</tr>
<tr>
<td>October</td>
<td>8.96%</td>
</tr>
<tr>
<td>November</td>
<td>2.99%</td>
</tr>
</tbody>
</table>
Middle East Water Total Lost Time Incidents by Occupation (Chart 3)
Based on 12 Incidents

- Barge Engineer/Ballast Control Op. 8.33%
- Crane Operator (Forklift Operator) 8.33%
- Motorman 8.33%
- Driller (Asst. Dr.) 8.33%
- Derrickman 8.33%
- Floorman 8.33%
- Roustabout (Lease Hand) 50.00%
Middle East Water Total Recordable Incidents by Occupation (Chart 4)
Based on 67 Incidents

- Floorman: 35.82%
- Roustabout (Lease Hand): 26.87%
- Driller (Asst. Dr.): 5.97%
- Derrickman: 5.97%
- Motorman: 5.97%
- Electrician (Electronic Technician): 1.49%
- Driller (Asst. Dr.): 5.97%
- Mechanic (Repair Technician): 7.46%
- Crane Operator (Forklift Operator): 2.99%
- Barge Engineer/Ballast Control Op.: 2.99%
- Rig Helper: 2.99%
- Welder: 1.49%
Middle East Water Total Lost Time Incidents by Body Part (Chart 5)
Based on 12 Incidents

- Feet/Ankles: 50.00%
- Finger(s) (thumb(s)): 25.00%
- Leg(s): 8.33%
- Shoulder(s): 8.33%
- Trunk/Torso: 8.33%
- Feet/Ankles: 50.00%
Middle East Water Total Recordable Incidents by Body Part (Chart 6)

Based on 67 incidents

- Finger(s) (thumb(s)) 35.82%
- Feet/Ankles 13.43%
- Leg(s) 7.46%
- Shoulder(s) 7.46%
- Toes 1.49%
- Lungs/Respiratory 1.49%
- Knee(s) 2.99%
- Back 1.49%
- Trunk/Torso 4.48%
- Head 11.94%
- Eyes 1.49%
- Hand(s) / Wrist(s) 10.45%
- Shoulder(s) 7.46%
Middle East Water Total Lost Time Incidents by Incident Type (Chart 7)
Based on 12 Incidents

- Struck By: 50.00%
- Caught Between/In: 41.67%
- Slip/Fall: Same Level: 8.33%
Middle East Water Total Recordable Incidents by Incident Type (Chart 8)
Based on 67 Incidents

- Strain/Overexertion: 1.49%
- Debris: 1.49%
- Cut: 2.99%
- Sprain: 1.49%
- Heat Exhaustion/Heat Stroke: 1.49%
- Struck Against: 5.97%
- Struck By: 22.39%
- Caught Between/In: 38.81%
- Slip/Fall: Same Level: 20.90%
- Slip/Fall: Different Level: 2.99%
Middle East Water Total Lost Time Incidents by Equipment (Chart 9)
Based on 12 Incidents

- **Hand Tools: Power** 16.67%
- **Pipes/Collars/Tubulars/Csg.** 25.00%
- **Iron Roughneck, Pipe Spinner, etc.** 8.33%
- **Rig Floor Winch/Deck Winch** 8.33%
- **Elevators** 8.33%
- **Decks (grating, walkway)** 8.33%
- **Engines/Pumps/Machinery** 8.33%
- **Material** 16.67%
Middle East Water Total Recordable Incidents by Equipment (Chart 10)
Based on 64 Incidents

- Rig Floor Winch/Deck
  - Rig Floor Winch
  - Deck
- Anchor Chains/Cables/Winches
- Top Drive (blocks, swivel, kelly)
- Crane
- Pressure Hoses/Lines
- Material
- BOP Stack (well head, tree)
- Stairs
- Engines/Pumps/Machinery
- Hand Tools: Power
- Iron Roughneck, Pipe Spinner, etc.
- Slings (rope, cable, chain, web)
- Pipes/Collars/Tubulars/Casing
- Slips (drill collar clamp)
- Elevators
- Boat Cargo
- Anchor Chains/Cables/Winches
- 4.69% Rig Floor Winch/Deck
- 1.56% Anchor Chains/Cables/Winches
- 4.69% Top Drive (blocks, swivel, kelly)
- 4.69% Crane
- 3.13% Pressure Hoses/Lines
- 6.25% Material
- 3.13% BOP Stack (well head, tree)
- 1.56% Stairs
- 7.81% Engines/Pumps/Machinery
- 6.25% Hand Tools: Power
- 4.69% Hand Tools: Manual
- 10.94% Pipes/Collars/Tubulars/Casing
- 4.69% Slings (rope, cable, chain, web)
- 4.69% Iron Roughneck, Pipe Spinner, etc.
- 4.69% Elevators
- 1.56% Boat Cargo
- 1.56% Anchor Chains/Cables/Winches

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Middle East Water Total Lost Time Incidents by Operation (Chart 11)

Based on 12 Incidents

- Tripping in/out: 16.67%
- Laying Down/Picking up Pipe/Tub: 25.00%
- Material Handling: Crane/Cherry Picker: 8.33%
- BOP Stack Install/Maintenance: 8.33%
- Equipment Repairs or Maintenance: 25.00%
- Rigging Up/Down Rig Move: 8.33%
- Walking: 8.33%
Middle East Water Total Recordable Incidents by Operation (Chart 12)
Based on 66 Incidents

- Rig Move (Towing/Anchor Handling): 1.52%
- Tripping in/out: 18.18%
- Travel/Transportation: 3.03%
- Making Connection: 3.03%
- Routine Drilling Operations: 1.52%
- Running Casing/Tubing: 4.55%
- Laying Down/Picking up Pipe/Tub: 9.09%
- Material Handling: Crane/Cherry Picker: 4.55%
- Material Handling: Forklift: 1.52%
- Material Handling: Manual: 9.09%
- Rigging Up/Down Rig Move: 1.52%
- BOP Stack Install/Maintenance: 4.55%
- Equipment Repairs or Maintenance: 22.73%
- Special Operations: 3.03%
- Walking: 7.58%
- Well Testing: 1.52%
Middle East Water Total Lost Time Incidents by Location (Chart 13)
Based on 12 Incidents

- Rig Pad/Rig Decks (rig/well site/location, yard) 8.33%
- Rig Floor 25.00%
- Pipe Rack/Pipe Deck 41.67%
- Mud Mixing Tank/Area 8.33%
- Engine/Generator Room 8.33%
- BOP Stack (well head/tree) Area 8.33%
Middle East Water Total Recordable Incidents by Location (Chart 14)
Based on 67 Incidents

- Anchor Winch Station/Area: 1.49%
- Mud Pump Room: 1.49%
- Jacking House: 4.48%
- Cherry Picker/Crane: 1.49%
- Anchor Winch Station/Area: 1.49%
- Mud Mixing Tank/Area: 4.48%
- BOP Stack (well head/tree): 5.97%
- Derrick/Mast: 2.99%
- Catwalk/V-door: 4.48%
- Rig Floor: 29.85%
- Pipe Rack/Pipe Deck: 13.43%
- Rig Pad/Rig Decks (rig/well site/location, yard): 13.43%
- Stairs/Ladders: 1.49%
- Crew/Work Boats: 1.49%
- Work, change, storage room: 4.48%
- Rig Pad/Rig Decks (rig/well site/location, yard): 13.43%
- Engine/Generator Room: 2.99%
- Shale Shaker: 2.99%
- Machinery Spaces: 2.99%
Middle East Water Total Lost Time Incidents by Time in Service (Chart 15)
Based on 11 Incidents

- >1 yr. < 5 yrs.: 81.82%
- >5 yrs. < 10 yrs.: 9.09%
- 10+ yrs.: 9.09%

Total: 100%
Middle East Water Total Recordable Incidents by Time in Service (Chart 16)
Based on 65 Incidents

- >1 y< 5 yrs. - 47.69%
- >5 yrs. < 10 yrs. - 27.69%
- 10+ yrs. - 12.31%
- 0 mo. < 3 mos. - 4.62%
- >3 mos. < 6 mos. - 1.54%
- >6 mos. < 1 yr. - 6.15%
- >3 mos. < 6 mos. - 1.54%
- >6 mos. < 1 yr. - 6.15%
- 0 mo. < 3 mos. - 4.62%
- 10+ yrs. - 12.31%
- >5 yrs. < 10 yrs. - 27.69%
Middle East Water Total Lost Time Incidents by Time of Day (Chart 17)
Based on 12 Incidents

- 22:00: 16.67%
- 2:00: 16.67%
- 3:00: 8.33%
- 7:00: 8.33%
- 8:00: 8.33%
- 11:00: 8.33%
- 12:00: 16.67%
- 14:00: 8.33%
- 4:00: 8.33%
- 3:00: 8.33%
- 4:00: 8.33%
- 7:00: 8.33%
- 11:00: 8.33%
Middle East Water Total Recordable Incidents by Time of Day (Chart 18)
Based on 67 Incidents

- 23:00: 5.97%
- 22:00: 7.46%
- 21:00: 2.99%
- 20:00: 4.48%
- 19:00: 4.48%
- 18:00: 1.49%
- 17:00: 10.45%
- 16:00: 7.46%
- 15:00: 1.49%
- 14:00: 1.49%
- 13:00: 5.97%
- 12:00: 14.93%
- 11:00: 10.45%
- 10:00: 1.49%
- 9:00: 2.99%
- 8:00: 1.49%
- 7:00: 4.48%
- 6:00: 1.49%
- 5:00: 2.99%
- 4:00: 1.49%
- 3:00: 2.99%
- 2:00: 2.99%
- 1:00: 2.99%
- 0:00: 5.97%
Middle East Water Total Lost Time Incidents by Age (Chart 19)
Based on 7 Incidents

- 26 - 35: 71.43%
- 36 - 45: 28.57%
Middle East Water Total Recordable Incidents by Age (Chart 20)
Based on 44 Incidents

- 26 - 35: 56.82%
- 46 - 55: 6.82%
- 18 - 25: 6.82%
- 36 - 45: 29.55%
- 26 - 45: 29.55%