

DROPPED OBJECTS

STILL HARMING STILL KILLING







"Working to make our industry a safer place"





- To raise awareness of potential dropped objects
- To explore methods for the control and prevention of dropped objects
- To recognise your personal responsibilities for the prevention of dropped objects
- Eliminate injury to people and damage sustained to equipment due to dropped objects throughout Industry.
- Ultimately to deliver a 'second-nature' dropped objects prevention strategy



DROPS Asia Objectives

Any object that falls from its previous static position under its own weight



Dropped Object Awareness and Prevention

WE ARE ALL EXPOSED TO POTENTIAL DROPPED OBJECTS

- A book falling from a shelf...
- A slate from a roof...
- A bolt falling from 100m...
- Other **REAL** examples...









AT WORK :

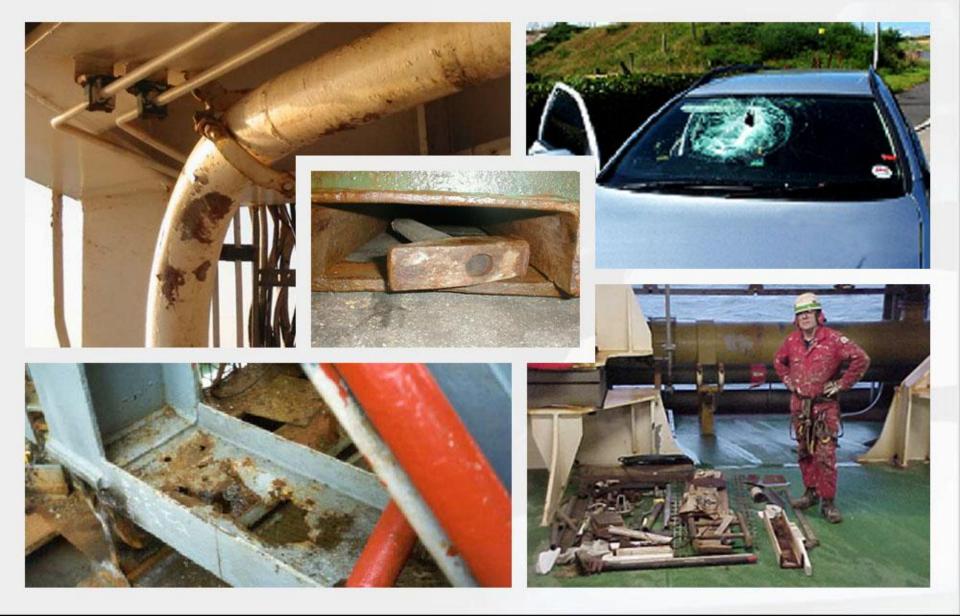
Causes of Fatality and Serious Injury in the Oil and Gas Industry

AT HOME AND AT LEISURE :

** The top three causes of fatal accidents are... falls from height...being struck by moving vehicles...and being struck by falling objects ** (RoSPA)



Dropped Object Awareness and Prevention





It's Still Happening...Real Incidents

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TABLE 1. Number and rate' of tital injuries among oil and gas TABLE 1. Number and new or train to maker of drawing and estraction workers and average number of drawing and workney has 1 by year — United States, 1990-2006¹

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SOURCE'S US Department of Labor Durate of Labor Statement, Carnet 2 getional Injuries (2005-2004). US Department of Labor wer Population Survey (1968-2005), US

way mean order is called $(\frac{1}{2},0,1)$ and we derive being much by roch or equipment (229a). Other courts included explosions $\ell^{(0)}\omega_1$ fills to longer levels $\ell^{(0)}\omega_2$ and form $\ell^{(0)}\omega_2$ (Table 2). The highest numbers of oil and give circumon occupational facilities occurred in Texas (153 [38%]). Lour uana (42 [1296]), Oklaboma (45 [1196]), Wyoming (32 [10%]), and \$4(= Means-G21(5%)). Aroung the mass where most of the fatilities occurred. Now Merrice 145.2 per 100,000) and Wroming (35.5 per 100,000) had the highest arectipe unreal fatality rates, compared with Oklahoma (33.3 per 100.000). Louisians 629.2 per 100.000), and Texts (25.5 per 100.000).

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SOURCE: US Department of Labor. Person of Fatel Companies Insuran (2003-2006)

Data for poor are preliminary

The 110 fatal highway more soluble mindemu is the industry were divided among acordination (42 (50%)). colliness between vehicles (40 [50%]), and other events (28 [26%]) (Table 3). These out of four highway findence $\{E_{n}^{n}\mid \ensuremath{^{n}} h^{n}h^{n}\}$ (as obviating for smaller to g - pick up) and delivery tracks) (35 [50%]) at semi-reactor traders (27 [2596]). A total of 39 (3596) workers in highway builting were not weating scatters, another 15 (12%) weathers were spected upon impact and likely were not wearing readeries. A total of 88 (22%) workers died after being struck by tools and equipment ensure of which were disperd from a heights, and another 24 (18%) were chight or compressed in moving machinesy or node. Approximately one fourth of all (address (116 [20%)) in this industry secured among employees of companies with fewer than 10

Automal Incomer for Companies of Safety and Health, CDC Educated Notes Sense 1993, when CEQI data became could able, body the marshes and same of occupational fatalities among oil and gas execution workers have stand with increases and document in dolling activity (ϕ,γ) . This $\psi(\phi)$ relation might be a result of averal factors, such drag an increase in the preparation of inexperienced workers, longer working hours, and the use of all meable oge conducting older equipment with fewer satepareds). Current petroleum prices suggest that introduct cil and gas extraction actions will continue. Therefore, unless changes are made to increase worker safety the high fieldsy rates described in this

esport are blody to commu-Ablumph highway craibes are the most common faral event in U.S. industries overall (8), section aspects of highway combin in oil and gas extraction creats the need for

TABLE 2: Number of Islandes in highway creatives among or traction workers, by type of event -- United United

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further study and targeted antercontents.

oil and gas extension are exempt from certain U.S. Department of Transportation housed service replacement Truck denses and workers in pickup trucks show haved

NIOSH 2003 - 2006 minuly present Asto, wiching

Fatalities among (3). 41

US Oil and Gas Workers Induction in

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The findings in this report as subject to at least that related hazard at the source.

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It's Still Happening...Real Incidents

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Fatalitics Among Oil and Gas

Extraction Workers -

United States, 2003-2006

OR and gas restantion (i.e., sensitiving all and natural gas

form the ground is a growing industry in the United States

employing approximately \$10,000 workers in 2006 (2)

In score years access in the subscore has thereased rule examply from an average of \$100 arrestly defined out in

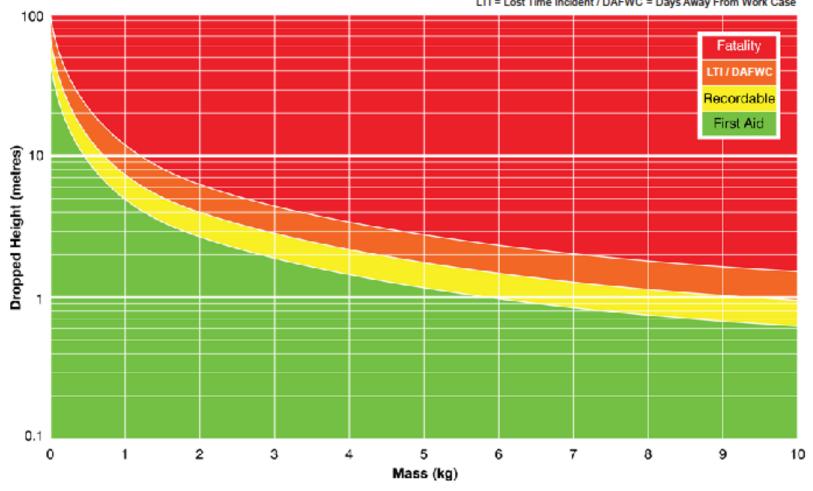
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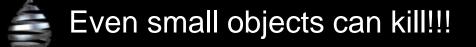
workers, by type of injury event - United States, 2003-2006*

Injury event	No. of fatal injuries
Highway crash	110
Struck by object	88
Explosion	36
Fall to lower level	30
The state state and inc.	27
Electric of compress of movin Flectric of management and la A total of 88 (22%) wo tools and equipment (mos	ikely were not wearing seatbelts. orkers died after being struck by t of which were dropped from a 5%) were caught or compressed
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It's Still Happening...Real Incidents





LTI = Lost Time Incident / DAFWC = Days Away From Work Case





Do you think this will kill if dropped from 10m?





"So what are we doing about it?"







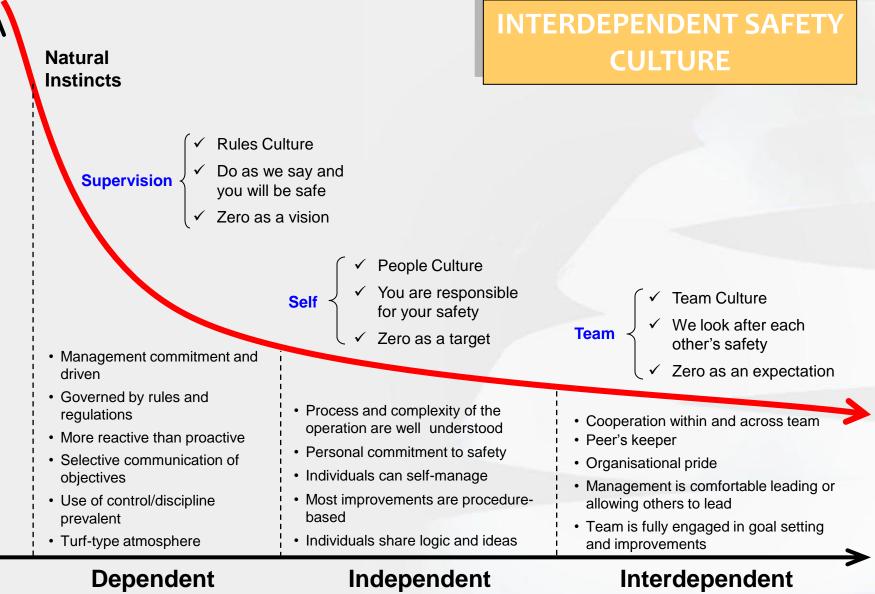
Workgroup Members

- Over 70 companies all sharing commitment and enthusiasm for dropped object prevention.
- Basic remit to consider and review all avenues available for improving the industry's dropped object prevention performance.
- Distil and identify key learnings and deliver these to industry effectively as awareness, best practice, recommendations, lessons, tools and techniques.









Bradley Curve - copyright DuPont deNemours



Injury Rate

"Interdependent Safety Culture"

- Assign specific focus groups to work each key issue to its conclusion as an effective deliverable product.
- Meet regularly to review progress, share best practice and lessons learned, prioritise focus areas and present new technologies / services.
- DROPS Work Group members all participate, contribute and help drive the direction and deliverables of the Campaign. Each brings their own organisation's influence and concerns to DROPS.







- DROPS has produced a broad array of tools, products and deliverables, including inspection programmes, awareness videos and presentations, safety checklists, guidelines, procedures and best practices.
- Marketing concept is a workpack system, where DROPS workpack contains all DROPS products to date with option to subscribe to future updates.
- Workpack format ideal for individual assets, eg platforms, rigs, terminals, bases and now hundreds in use around the world.





- www.dropsworkpack.com is the main vehicle for presenting and marketing our products and giving access to free downloads, alerts, contacts, news and general DROPS information.
- Developing more products and deliverables is an ongoing process – effectively the output of the DROPS Work Group.
- Sale of Campaign Packs and Work Group Membership subscriptions provide the revenue for ongoing product development on a self-sustaining basis.



A Great Ideal



Al the GHI DRCPG forum, a preventiation was detivered showing a unique solution to the problem of potential dropped objects failing from container podiets - an issue highlighted in our task Newskidlert

The solution is a mechanised and environmentally thenry with high pressure cleaning lood capable of menoting ad decina and heavy had deposits from the container positical and base transes in a sale and effective namer. The solution is currently being reviewed by the DRGH'S local Plactice Sub-conmittee. Kinds function boardanise and sale and effective namer.

Join the DROPS Campaign

Have you considered j orang the growing back of DROPS Wongroup Sembers? At prevent, we have 43- participating compares and we meet every eight seeks in Abordien: As a tempter loganapasi, jou use introt of a forum meetings, usues with a free company, pack and you are instrumental in orthing the decidion and distensibles of the Campagia, Athe Forum meetings, we exhangle before packolo, prevent meetins and tachniques and clicous performance in an open and collaborative entromers. For interms cellules in DROPS meetings(), contact campapelinearing(consentinger), contact campapelinearies const.

Any Ideas?

- V Fyou have any ideas, comments or suggestion that you with to share with the DROPS Team,
- tend ut the details or dtop ut an email: DROPS Compaign from Max and Co. 12 Albye Tenace Aberdoon ABTO 119
- @ campaignean+thopsarahpack.com



