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# **Contractor Health and Safety Forum**

## **7<sup>th</sup> March 2017**

# **Welcome**

# **Objectives**

Craig McDougall

SPEN Major Projects Delivery Manager

# Objective

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Improve Health and Safety Performance across the portfolio through Leadership and Collaboration.

- Share information and further improve this process
- Update on some existing working groups and initiate new one
- Listening to your feedback
- Working together
  
- The key challenge
  - we all face is to deliver a step change for safety performance in relation to vehicle and plant operations to reduce the number of incidents

# Day at a glance

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- **Welcome / Objectives / Introduction / Safety Contact**
- **Overview of what we achieved in 2016**
- **UK Networks HS Performance**
- **Update on Method Statement / Setting to Work working groups**
- **Update on W@H Group**
- **Summary of Near Miss and SOR trends analysis**
- **Coffee**
- **5 x Health and Safety Essentials**
- **Radar / Site Engagement**
- **Vehicle and Plant Interactive Session**
- **Lunch**
- **Health Topic**
- **Vehicle and Plant Session Output**
- **Q&A**
- **Close**
- **14:30 – 15:30 SPEN / IEC Management Team available for discussions.**

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# Introduction

Bob McGuire  
SPEN Programme Manager  
Major Projects

# Interaction and Participation

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- Please feel free to ask questions at any time, take advantage of the I Pads to submit questions or comments throughout the day
- Interactive session focuses on vehicle and plant movements with the target to establish safety critical rules - we will be asking questions and looking for responses via voting technology
- Questions submitted will be reviewed and where possible responded to during the day and Q & A session
- Any question that can't be answered on the day if you leave a contact we will respond after the event
- Survey will be sent out after the event please take the time to complete – your views are important

# Output from Last Forum

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- At the last Forum we took over 50 questions / suggestions.
- We published responses to questions via email.
- **What we promised to do:**
- Expand ability for anonymous reporting via site SOR drop boxes.
- Share SOR trends / analysis output - covered today.
- Issue safety / environmental alerts.
- Improve engagement with site teams via RADAR - covered today.
- Initiated meetings between contractor / SPEN / IEC management teams - ongoing
- Look to split forum into working groups for future events.



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## Safety Contact

Brian Dunn

Health & Safety Manager

SP Transmission



# Safety Contact : Telehandlers 2 x Overturned / HGV Incident

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# Overview of what we achieved in 2016

Bob McGuire

# Overview of what we achieved in 2016

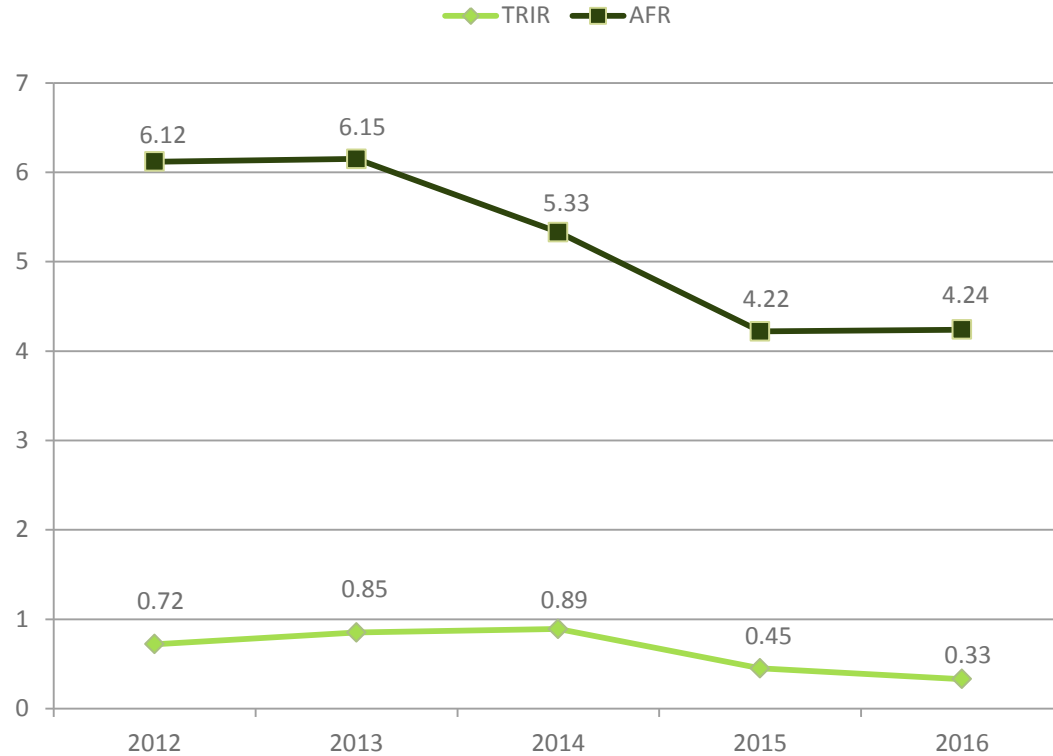
Bob McGuire

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# **UK Networks H&S Performance**

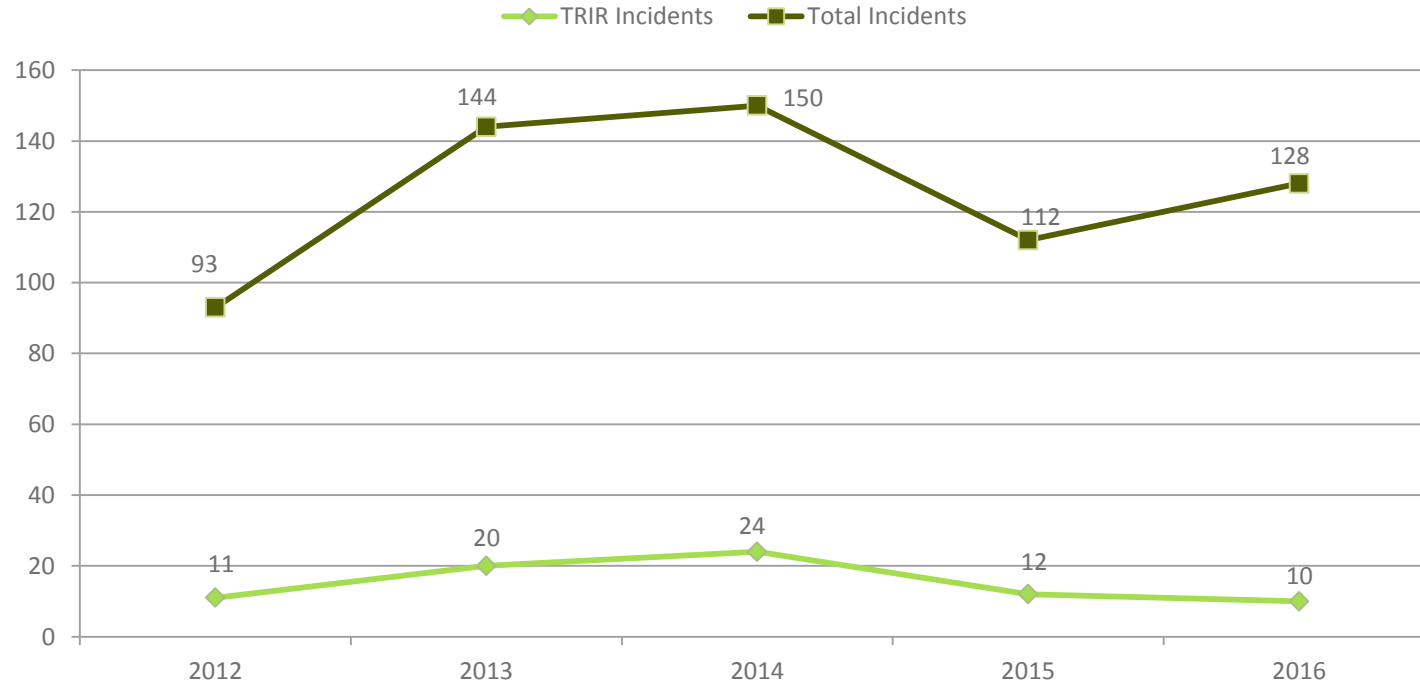
Kevin Thompson  
IEC Networks H&S Lead

# UK Networks Safety Performance

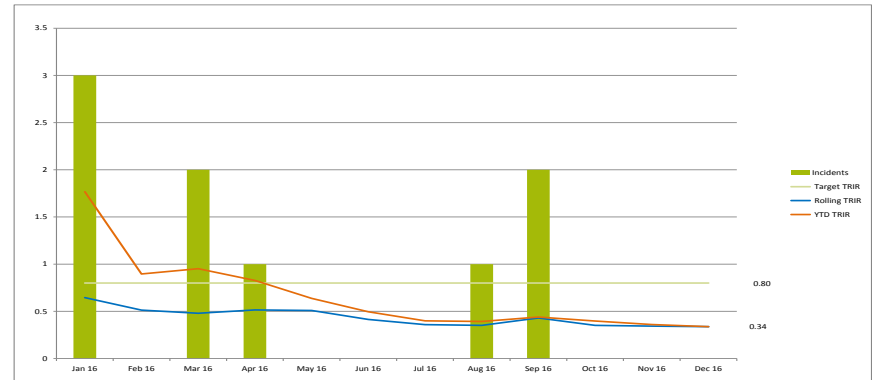
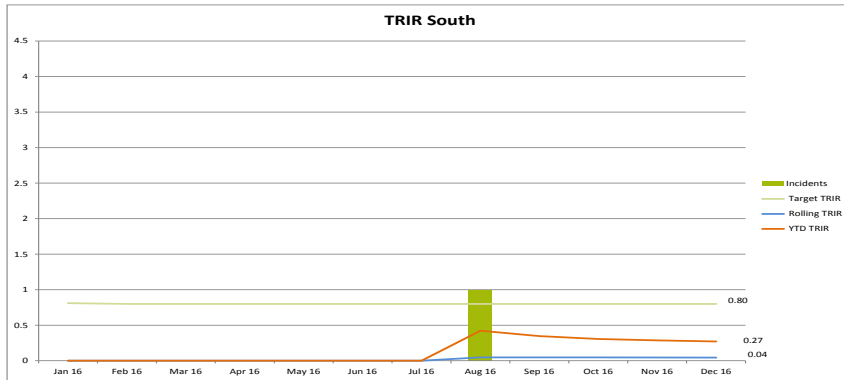
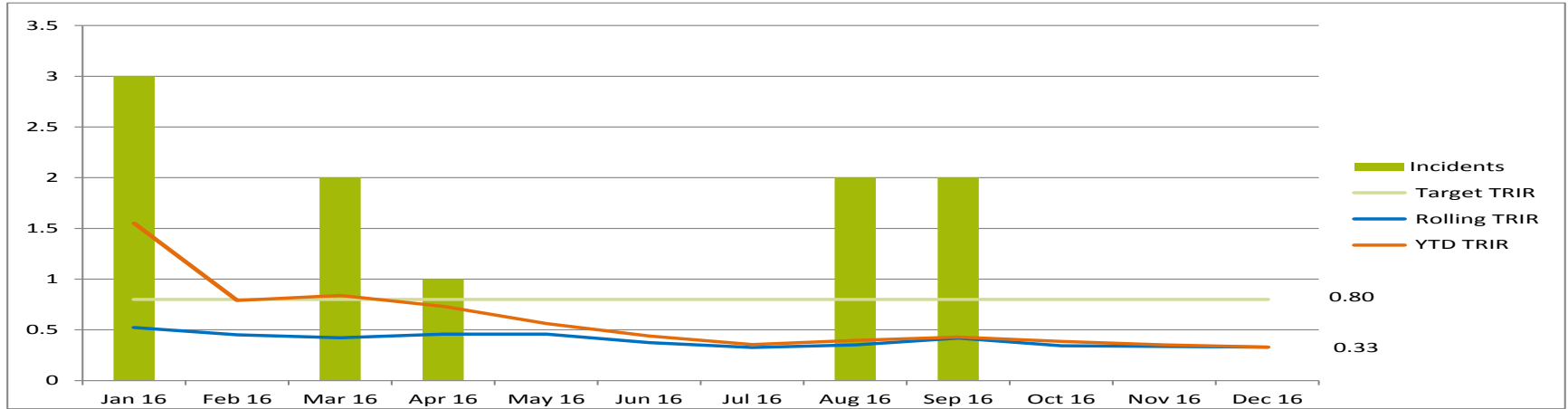


Year	Manhours	% Change
2012	1,519,024	-
2013	2,341,389	54%
2014	2,710,456	15%
2015	2,649,471	2%
2016	3,036,363	14%

# UK Networks Safety Performance



# UK Networks Safety Performance



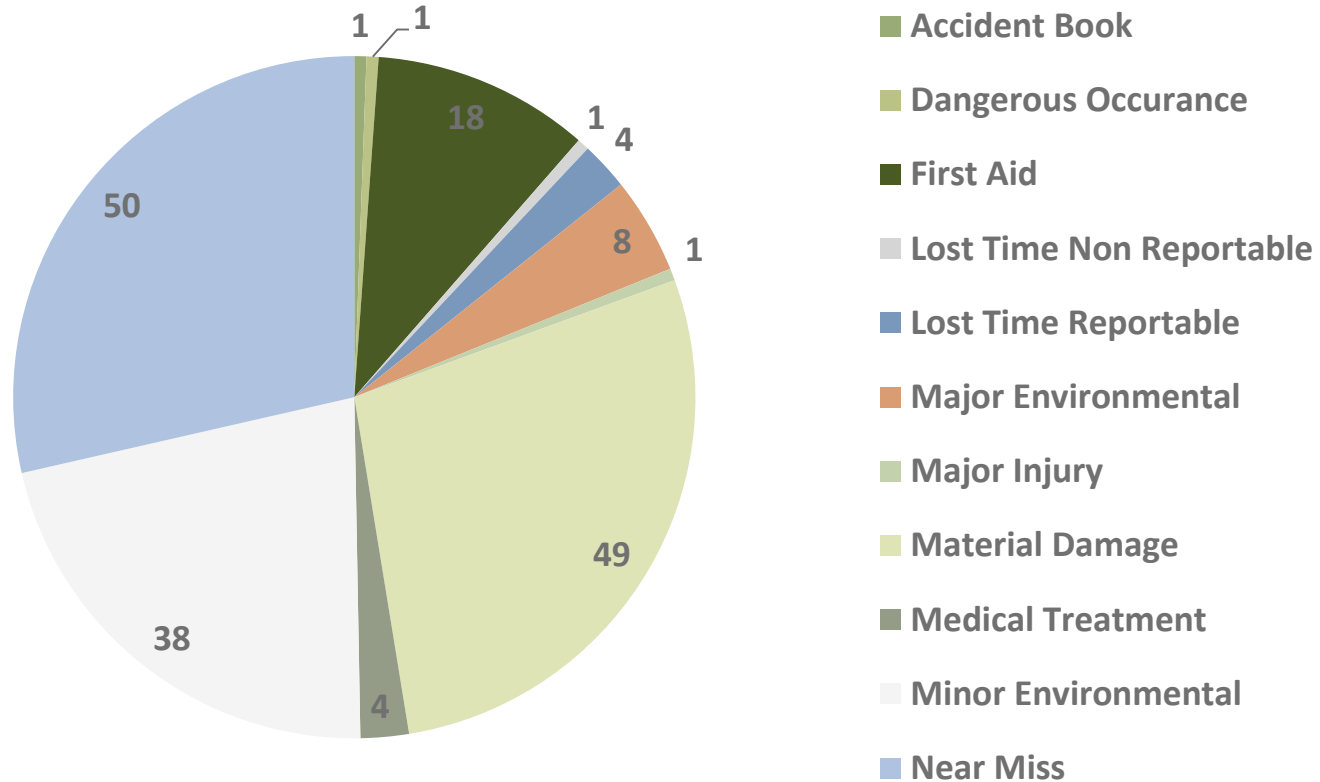
# UK Networks Safety Performance

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- 3,036,363 hours worked in 2016 – 14% increase on 2015
- 0.33 – current TRIR for 2016 – 36% improvement from 2015 TRIR
- 4.24 – current AFR for 2016 – 0.4% increase from 2016 AFR



# UK Networks Safety Performance



# UK Networks Safety Performance

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Fatality

0

Serious or disabling injury

1

Medical Treatment

4

Recordable injury

6

First Aid

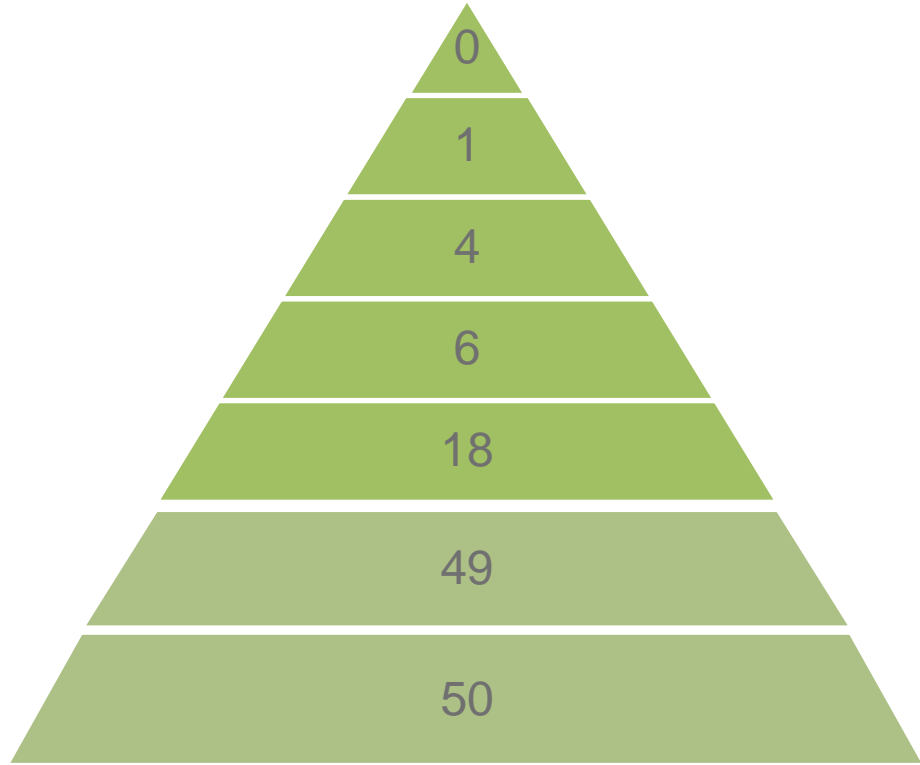
18

Material Damage

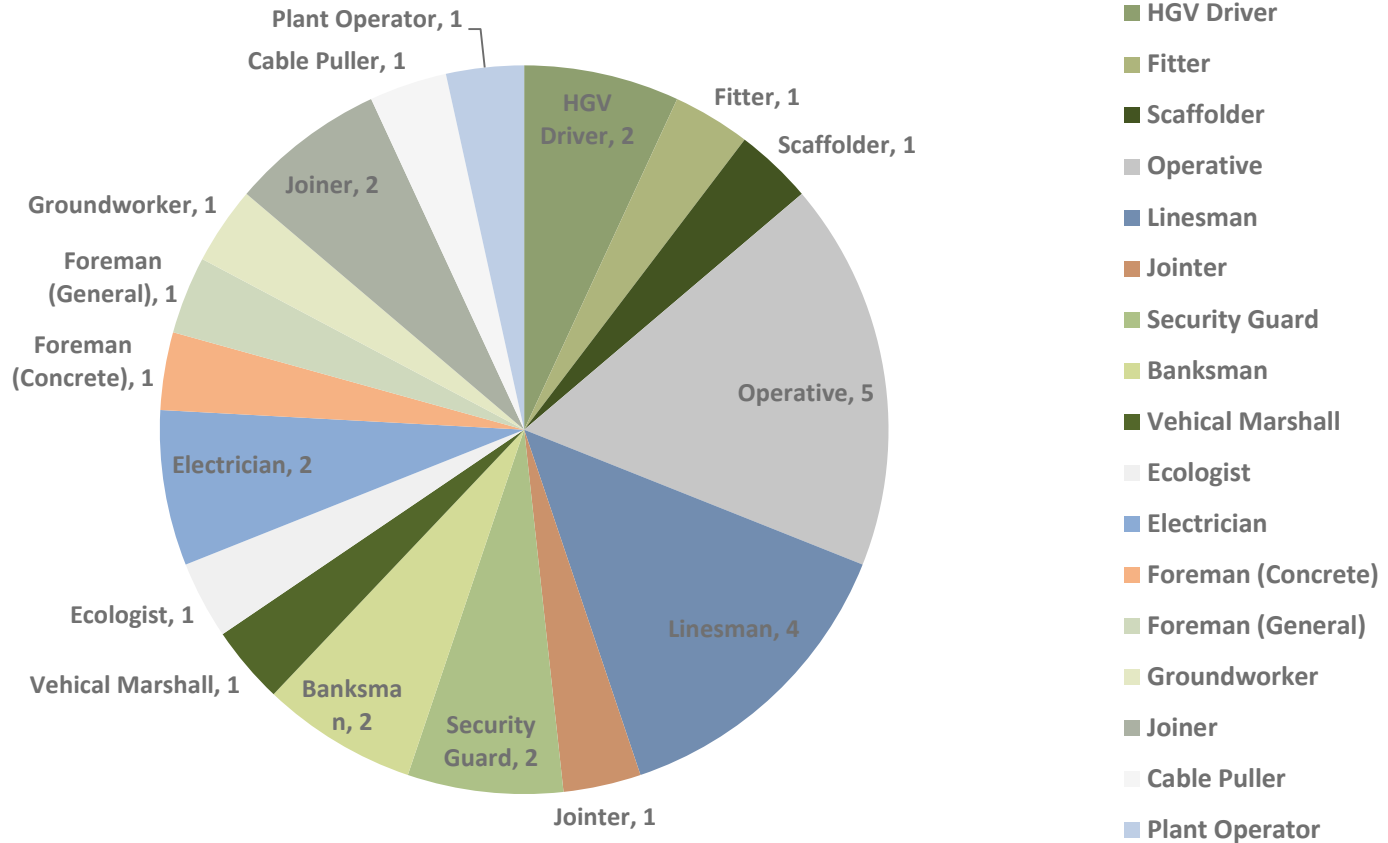
49

Near Miss

50



# UK Networks Safety Performance



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# Setting to Work Method Statement Working Groups

Jillian McRury  
Lead H&S Advisor



**IBERDROLA**  
Engineering & Construction

UK NETWORKS

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# Safety Improvement Groups

Method Statement Group

Setting to Work Group

### Method Statement Group

- Keith Gordon - IEC
- Ian Roberston - RJM
- Keith McDonald – Raynesway
- Hugh Doran- Balfour Beatty
- Michelle Brunton – IEC
- Dave MacDonald - AMEC

### Setting to Work Group

- Kevin Smith – IEC
- Jillian McRury – IEC
- Raymond Innes – RJM
- Ivan Conway – Roadbridge
- Francis MacCauley – Barhale
- Fraser Kay – Balfour Beatty
- Kevin Thompson – IEC
- Chris Green – Kirby
- Rob Johnson - Powell

### Method Statement Group

Introduction

Group Discussions

Findings of the Group

Recommendations of the Group

Outstanding Actions from the Group

- Using Kelvin TopSet (KTS) Method have shown that one of the underlying causes is how we set our people to work
- Either a lack of sufficient discussion on the method to be used or a lack of detail on the sequence of work
- Communication of the information to the operatives has been identified as a cause
- Where a dynamic change has taken place, the working party have failed to STOP and review the method and risks



### Group Discussions

Discussion and review of current Method Statements have been conducted on the following key subjects

- Method Statement Content
- Issues with the Workpack
- Effectiveness of the Workpack
- Ease of Communication

### Issues with Method Statement Content

#### Site Specific Information

- Often buried in the workpack

#### References to other documentation

- Often references to other RAMS/ Work instructions

#### Ease of Communication

- Information Overload

### Issues with the Workpack

Information lost in translation between templates due to difference in format

- Hold points
- Document references
- Risk Matrix

Consistency of IEC Review process

- Sequence of work should be for operative, not reviewer
- Lack of consistent reviewing by IEC led to frustration on different sites (accept/reject)

Ease of Communication

- Information Overload

## Effectiveness of the Workpack

### Ease of Communication

- Information overload

### Communication location, suitability and format

- Good facilities throughout – no issues

### Operative survey

- 162 Operatives were surveyed
- Civil / OHL / BoP / Manufacturer

### Operative Survey

- 97.5% of those surveyed said they (or someone in their work party) had a work pack
- 2 in 5 (39%) of Workpacks contained more than 30 pages
- Only 1 in 5 (19%) of those surveyed can be bothered reading a work pack with 30+ pages
- The majority (63%) of those surveyed can only be bothered reading a work pack with up to 10 pages

### 1. **Site and Task Specific Information should be included at the Start of the Method Statement (ideally first 5 sections)**

- Sequence of the Works and Responsibility for Implementation (operative focused)
- Access / Egress to the Works (Site specific)
- Inherent Site Risks Specific to this Activity
- Specialist PPE Requirements for this Activity
- Specialist Resource Requirements for this Activity

### 2. IEC Method Statement REVIEW SHEET Improvements

- IEC Method Statement Review Sheet to be issued to Contractors
- IEC Method Statement Review Sheet Guidelines to be reviewed
- Consistency Training of IEC CMs/SMs in use of review sheet

### Current Action in Process

- Issue New Method Statement Template for site trials at Currie 275/132 and Kilmarnock South 400/275/132 (complete end Q1)

### Outstanding Actions

- Communicate change
- Organise Consistency training for IEC CM/SM
- Final template update based on site trails
- Update on IEC system





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Engineering & Construction

**UK NETWORKS**

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# Setting to Work

## Setting to Work Group

**Introduction**

**Group Discussions**

**Findings of the Group**

**Recommendations of the Group**

**Outstanding Actions from the Group**

**Timescales for the Group**

- Using Kelvin TopSet (KTS) Method have shown that one of the underlying causes is how we set our people to work
- Issues on sites regards command and control of setting to work activities.
- Setting to work steps not fully completed well by appropriate supervisor
- Communication of setting to work steps have been poor and not consistent across all sites
- Where a dynamic change has taken place, the working party have failed to STOP and review the method and risks

### Group Discussions

After discussion between the various attendees the following areas were selected for further review.

- Site Inductions
- Method Statements/RAMS Briefings
- Daily Briefings and **Coordination Meetings**
- Point of Work Risk Assessment and Briefings

### Issues with Site Inductions

Often too long/not site specific.

Lose interest of staff

Duplication of content between IEC and contractor inductions.

### Recommendation

Give all staff “core” or corporate induction annually. Minimum standard document for core induction to be added to CSPR.

Only be given focussed and site specific inductions followed by contractor orientation when arriving to different IEC sites.

### Method Statement Briefings

Difficult at times to concentrate on most important items contained within RAMS. RAMS were often too lengthy and generic.

### Recommendation

RAMS to be briefed using new Method Statement template as a guide.

Guidance document on delivering method statement briefing to be issued with CSPR and implemented on site by those giving briefings.

### Effectiveness of Daily briefings

Following on from the site coordination meeting...these topics should be discuss in daily briefing - Challenge to ensure consistency and confirm that most important matters discussed with site personnel.

### Recommendation

Ensure consistency by introduction of a minimum content guidance in the CSPR.

Include workforce to discuss learning points from the previous days work – what went well / what did not.

### COORDINATION MEETINGS

- Attended by all supervisors on site
- Discuss information pertaining to the work carried out by your teams – this should be made part of the briefing.
- IEC are looking to further develop the content and quality of the Co-ordination meetings and provide guidance



### Point of Work Risk Assessment Issues

Perceived as a tick exercise by many – not given sufficient thought and examples of where risks are being missed

### Recommendation

- Revised format of Point of work risk assessment proposed.
- Aligned with Method Statement with physical checks at point of work to ensure that control measures are sufficient to control hazards at the point of work.

## Setting to Work – Outstanding Group Actions

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- Finalise layout of guidance documentation for inclusion in next revision of CSPR.
- Agree on method to record annual “core” inductions.
- Organise training/briefing of guideline documents to IEC CM/SM for cascading to contractor workforce.

- Work on developing a training pack to be delivered to staff responsible for setting staff to work.
- Attendees of group considered that behavioural safety was worthy of further review.



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## Working at Heights

Adrian Parker  
Portfolio Manager, Babcock

Bob McGuire



**Balfour Beatty**

**MORGAN  
SINDALL**  
CONSTRUCTION  
INFRASTRUCTURE

**OMEXOM**  
POWER & GRID



**POWERTEAM**



**PLPC LTD**  
POWER LINE SPECIALISTS

**Voltcom**  
GROUP



**NORPOWER**



# Transmission OHL W@H Safety Forum

- Forum established 2014 with main transmission line contractors.
- Initiatives implemented including danger zone control / tool tethering and rolled out during briefing of safety critical rules in Jan 2015.
- Consistent approach introduced across all transmission overhead line contractors working for SPEN / SSE.
- Anonymous survey of UK transmission OHL line teams undertaken to obtain data in 2014 and post introduction of initiatives in 2015 and 2016.
- Exceptions to key safety critical rules refreshed by forum in 2015 and 2016 and personal cards issued to site staff on commencement of works in 2017.

## Results for 2016

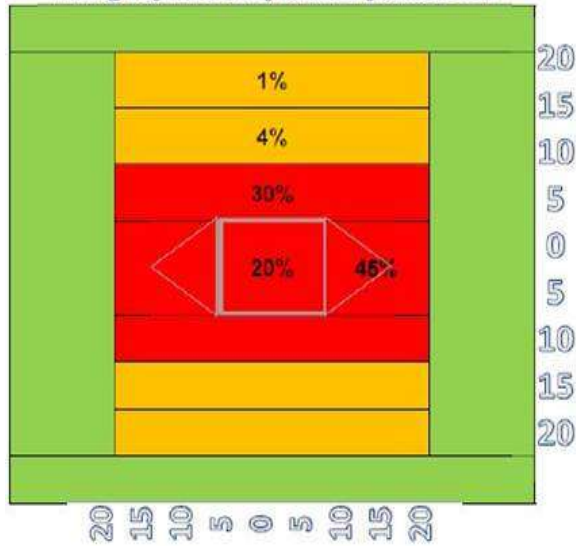
- Over 90% reduction in high potential objects dropped over previous year survey
- Further 12% reduction in total objects dropped per gang over previous year
- Further reduction in area covered by fallen objects (all with 5m of point of work)

# Transmission OHL W@H Safety Forum

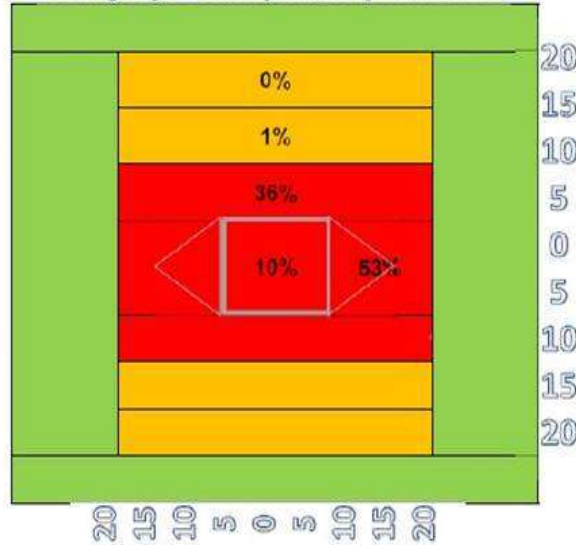
Summary of Objects Dropped	2014	2015	2016
Washers / Split Pins/ Lashings / Pens Scotch Tape and Nuts	126	62	33
Bolts / Dowel Pins / Earth Braids	60	16	9
Conductor Shoes / Vibration Dampers / Spacer Dampers / Bonding Spacers / Lugs	26	4	0
Socket / Adjustable Spanner / Podger	42	8	2
Arcing horn / Platform / Running Block	3	0	0
Total Items Dropped	277	90	44
<b>Survey Sheets Returned</b>	<b>128</b>	<b>80</b>	<b>49</b>

# Transmission OHL W@H Safety Forum

Falling Objects Survey Summary Sheet 2014



Falling Objects Survey Summary Sheet 2015



Falling Objects Survey Summary Sheet 2016





# Transmission Overhead Lines

## Safety Critical Rules

# Agreed Exceptions to Rules Additional Exception Added Dec 2016

Instances where working above / below each other cannot be avoided are:

- Tower Painting: Paint Brushes are excluded from requirement to tether hand tools ONLY at towers where the risk to persons and property at ground level can be controlled via demarcation of danger zone or risk eliminated. Towers requiring brush tethering must be identified and agreed with Client Project Manager prior to commencing works.
- ACSR/ACCR conductor trimming tool no requirement to tether when in use on conductor to remove outer strands.

# SPEN Client Perspective

## Overall Safety Performance Transmission OHL Projects

SPEN total man-hours worked and improvements in OHL projects safety performance.

### Key Changes

Improved ownership / leadership and engagement from site supervisors.

Improved pre-planning of task.

Greater presence on site by supervising engineers.

Revised MSRA's improved clarity of work procedures / a number of legacy errors and issues identified in standard Work Instruction Manuals post incidents.

Stop work protocol now embedded.

	2014	2015	2016
OHL Projects Manhours Worked	<b>876,817</b>	<b>847,846</b>	<b>789,300</b>
TRIR	<b>1.37</b>	<b>0.71</b>	<b>0.38</b>

# Babcock Contractor Perspective

## Overall Safety Performance Transmission UK OHL Projects

Total UK man-hours worked and improvements in OHL projects safety performance.

### Key Changes

- Everyone knowing and taking responsibility for their worksite and team
- Giving everyone the time and ability to challenge and review methods of work
- Setting teams to work correctly
- Big emphasis on hazard spotting and SOR reporting driving reduction in near misses and accidents
- Collective approach and full disclosure of safety performance across sites at weekly calls

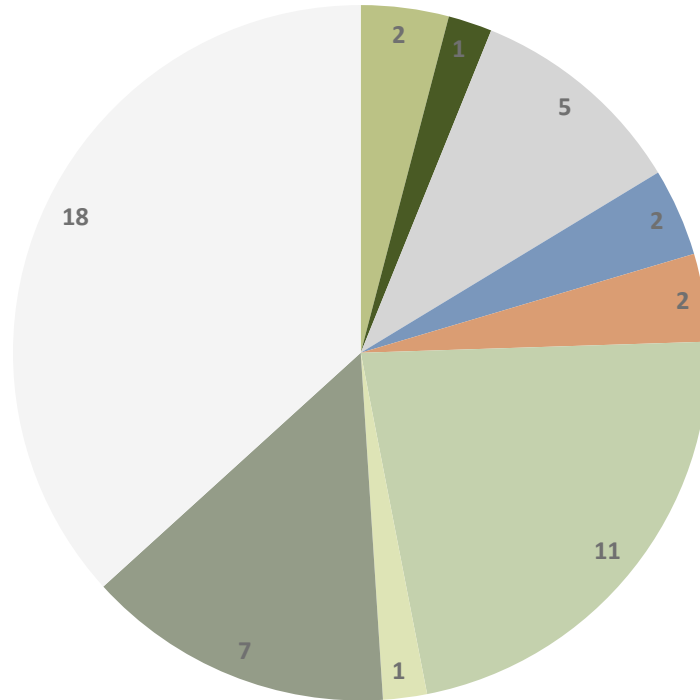
	2014	2015	2016
OHL Projects Manhours Worked	1,786,589	1,473,323	1,588,793
TRIR	2.35	0.81	0.25

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# Summary of Near Miss and SOR trends analysis

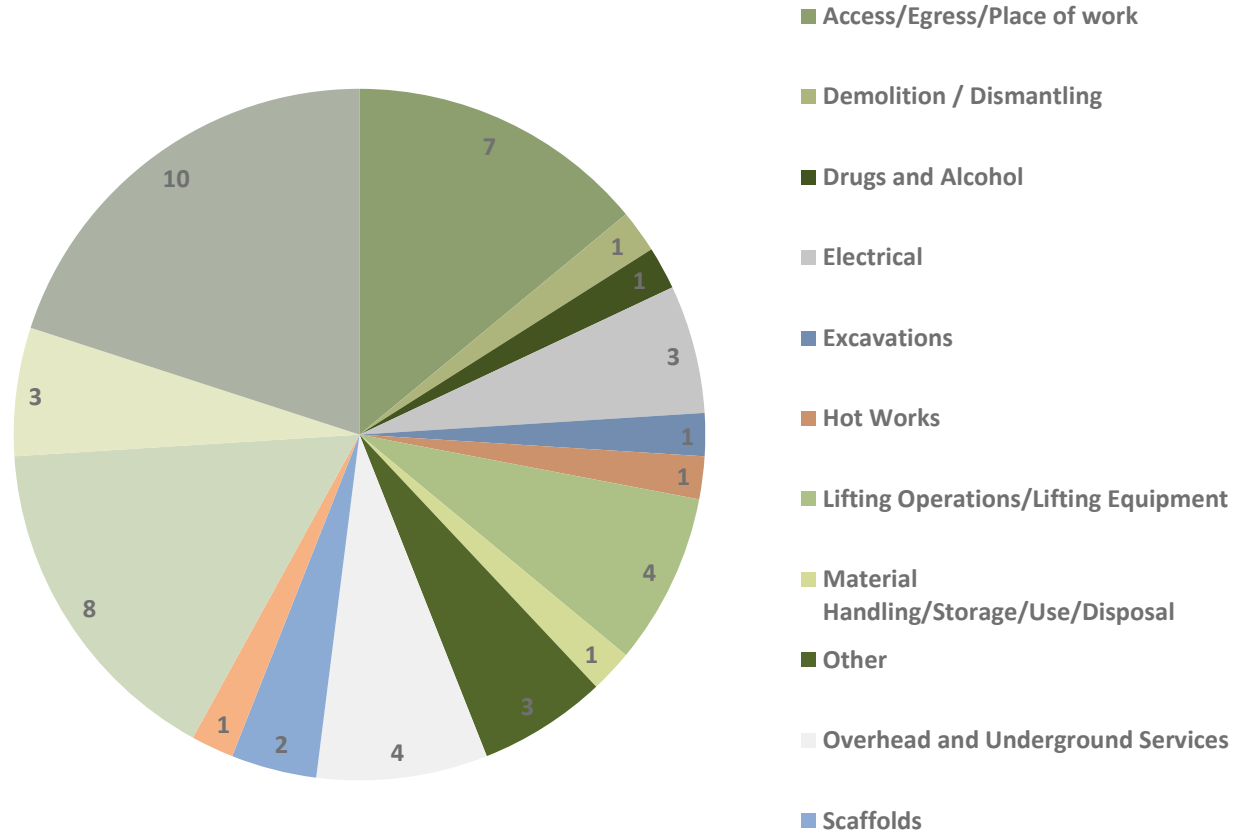
Kevin Thompson

# Near Miss and SOR Trends Analysis / Material Damage

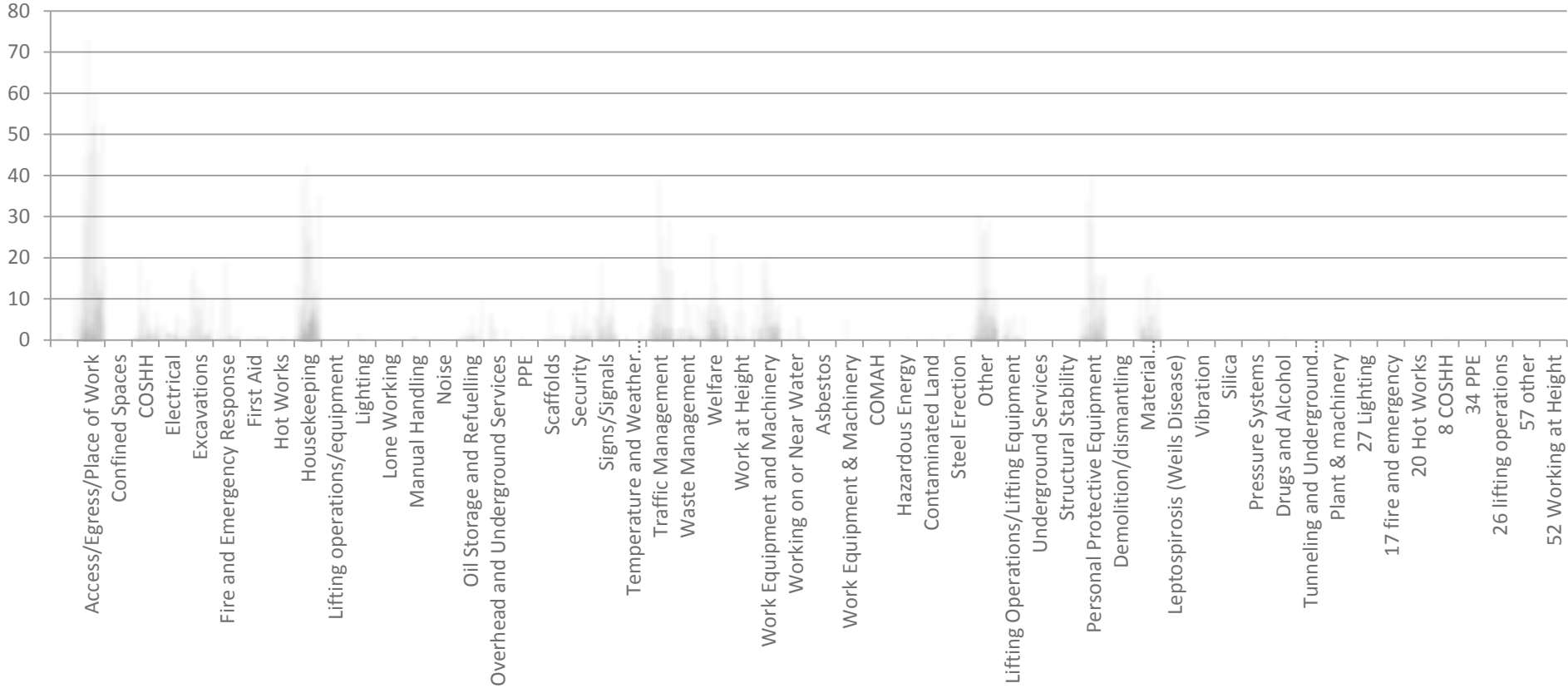


- Material Damage
- Access/Egress/Place of work
- Demolition / Dismantling
- Excavations
- Lifting Operations/Lifting Equipment
- Material Handling/Storage/Use/Disposal
- Overhead and Underground Services
- Structural Stability
- Traffic Management
- Work equipment and Machinery

# Near Miss and SOR Trends Analysis / Near Misses



# Near Miss and SOR Trends Analysis / 2016 SOR Analysis (3993 Total)





# Reponses and questions

Craig McDougall

SPEN Major Projects Delivery Manager

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# Coffee

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# 5 x Health and Safety Essentials

Brian Dunn

# SPEN Health & Safety Essentials

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**We follow our processes, rules and procedures**

Health & Safety rules are based on our experience and legal requirements - compliance with them is everyone's responsibility.

It makes sense to follow them and don't be afraid to challenge unsafe practices.

No one should get injured following safe procedures.



**We promote health and wellbeing, in and outside work**

Know the health risks we may be exposed to at work and ensure that we are aware of the controls in place that help protect us.

Don't ever come to work under the influence of drugs and alcohol.

Healthy behaviours help us stay fit for life and fit for work.



**We only undertake work we are competent to do**

Know the risks, know your limits and maintain your competence.

Take responsibility - before you start work - make sure you are able to carry it out safely.

Only undertake work you are authorised to do.



**We look out for each other and work as a team**

We will always look out for each other and work towards the same objective - going home safely.

Understand your own responsibilities within the team and listen to each other's concerns.

Silence is consent - always constructively challenge unsafe behaviours and decisions.



**We think before we act - assess and control the risks**

Take 5 before you act - be aware of your situation and surroundings.

Assess and understand risks, implement and comply with controls.

If it looks or feels unsafe it probably is!

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# Radar / Site Engagement

Kevin Thompson

# RADAR / Site Engagement

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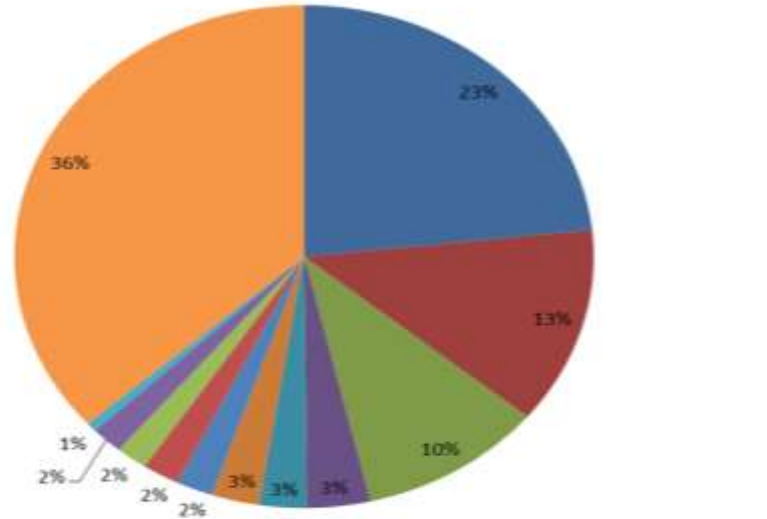
- **Responsible for each other**
- **Acknowledging unsafe situations**
- **Dedicated to minimising risk**
- **Aspiring towards an interdependent workplace**
- **Review and React**

# RADAR / Site Engagement

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- Iberdrola Initiative
- Behavioural Based Safety Programme
- Groups will be formed to identify unsafe situations within workplace
- Groups will agree commitments to eliminate unsafe situations
- Findings recorded in a global database
- Regular Review Meetings

# RADAR / Site Engagement



- Other human factors
- Unsafe positioning
- Lack of concentration when performing a task
- Improper or violent movements
- Efforts, inadequate, uncomfortable positions
- Inadequate task sequence
- Improper handling of materials or substances
- Improper use of individual protective equipment
- Work speed or inadequate operations
- Improper use of hand tools
- Inadequate use of equipment, machinery, vehicles, ...
- No wrong individual behavior perceived



# RADAR / Site Engagement

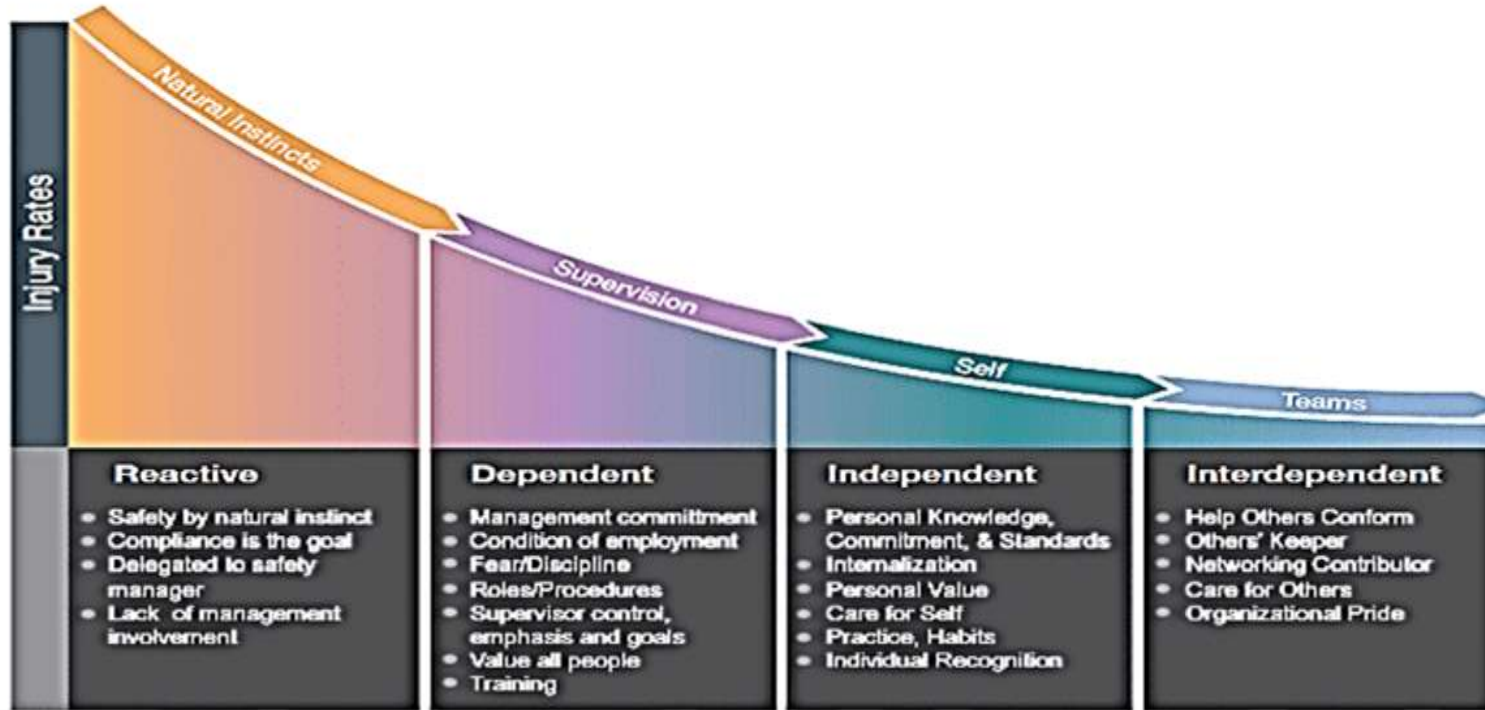
	FREQUENCY INDEX*				
	2010	2011	2012	2013	VARIATION
IB. DISTRIBUCIÓN ELÉCTRICA	6,29	3,85	2,56	3,71	- 41 %
IBERDROLA GENERACIÓN	2,31	2,57	1,42	1,99	-14 %
IBERDROLA O&M	1,46	0,00	1,72	0,00	-100 %
IBERDROLA RENOVABLES	8,18	4,83	3,10	2,74	-67 %
IBEDROLA SA	0,00	0,06	0,72	0,40	0,4 %
TOTAL IBERDROLA ESPAÑA	4,20	2,80	1,93	2,48	-41 %

\*

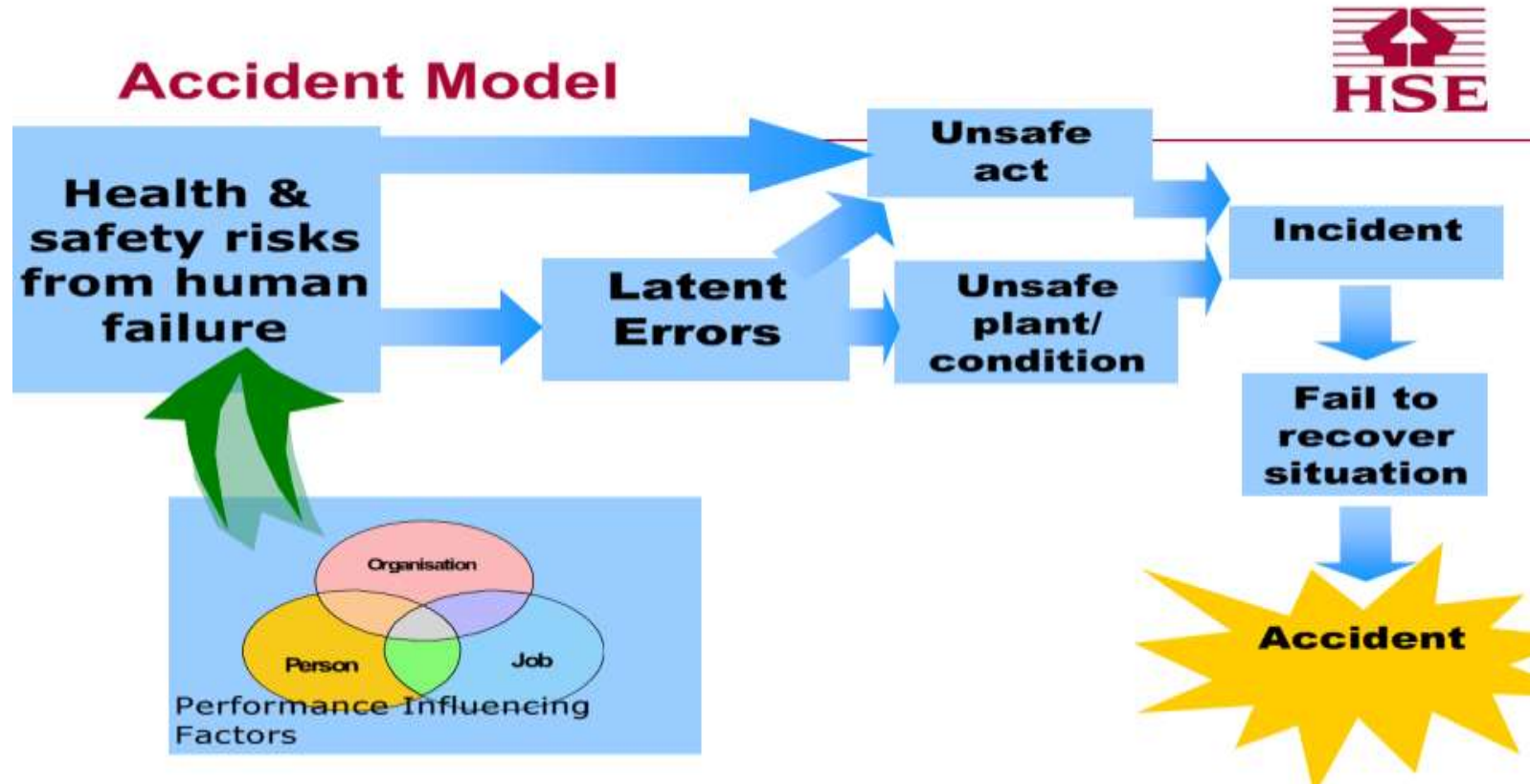
Number of accidents resulting in absence / 1000 working hours

# RADAR / Site Engagement

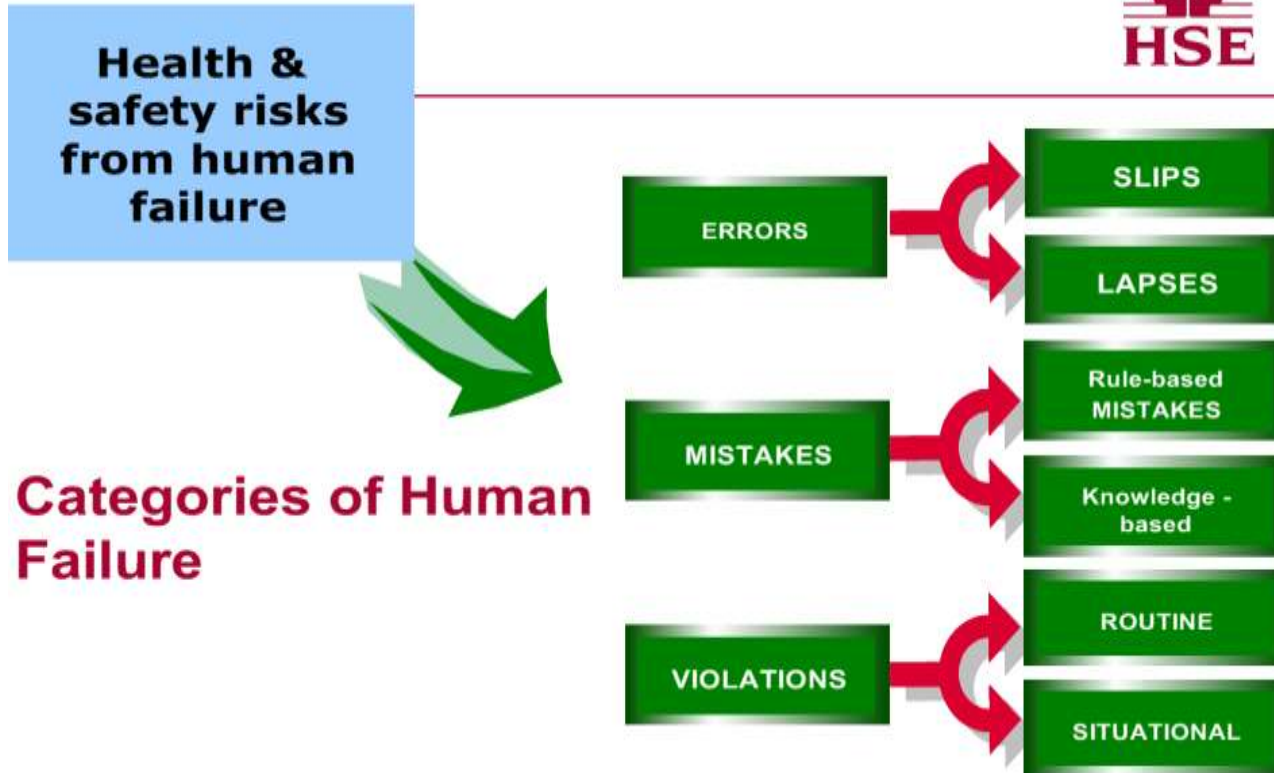
## DUPONT BRADLEY CURVE



# RADAR / Site Engagement



# RADAR / Site Engagement



# Is safety on your RADAR?



If your going to site today....

We will not interfere  
with or ignore  
barriers or signs



We will ensure  
correct use of PPE



We will accept and  
respect challenges



# Is safety on your RADAR?



1. We will not interfere with or ignore barriers or signs
2. We will ensure correct use of PPE
3. We will accept and respect challenges

*Lets work together to build a safer workplace*



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# Vehicle and Plant Safety Critical Rules

Brian Dunn H&S Manager SPT  
Barry Hughes-Lead PM IEC

# Overview of Vehicle / Mobile Plant Incidents

**During 2016 across the SPEN business there were a considerable number of incidents involving vehicles and mobile plant.**

- *47 incidents across SPEN, including the Western Link joint venture and IEC managed projects.*
- *Across the UK we are aware of 4 fatalities in other companies involving vehicles and mobile plant during Q4 of 2016 alone.*

**In 2017 we have already had 9 incidents.**

- *A tipper lorry overturned whilst unloading.*
- *Telehandler overturned.*
- *Various vehicles going off the road.*

**We have a history of similar events.**

- *We had a similar incident with a tipper lorry overturning at Tongland in June 2016.*
- *We had several Telehandler overturns in 2016.*
- *We had numerous incidents of other vehicles overturning.*





# 2016 UK Q4 Fatalities

Location	Organisation	Incident	Month
Blackhillock	SSE	Dumper struck a fellow worker, resulting in his death.	Oct
Lawton (Essex)	Rose Construction	Dumper overturned, resulting in the death of the driver.	Oct
M1 Motorway Project	Western Gas Alliance	Dumper struck a fellow worker, resulting in his death.	Oct
East Claydon	NGT	Lorry mounted crane operator received crush injuries of which he later died.	Nov

# 9<sup>th</sup> January 2017 - SPT (IEC) – Blackhill SW Scotland



2017 - Tipper lorry overturned whilst delivering sand.



## History - 9<sup>th</sup> June 2016- SPT (IEC) - Tongland



2016 - Tipper lorry overturned whilst delivering Type 1 material.

## History - 12<sup>th</sup> January 2016 – SPD - Ayrshire District



2016 - SPEN lorry overturned during lifting operation to unload poles.

# History - Some of our other 2016 incidents



## 2017 – How do we improve?

- Establish a vehicle & mobile plant forum to drive positive change & share learning.
- Work together to establish best practice and build focus & awareness.
- Create & apply vehicle & plant safety critical rules.
- Actively track and trend incidents, aiding early interventions.

# Ongoing Improvement

As we build upon the points already covered we will continue a sustained focus based around these three headings and ensure that they become embedded as normal practice:

**PEOPLE**

**PLANT**

**PROCESSES**



# Safety Critical Rules

Universal Minimum Standard across all SPT projects

Must drive Tangible safety Improvement

Must be deployable on all projects and work types

Escalated Process to manage exceptions

Zero tolerance enforcement

Agreed consequences

# Safety Critical Rules

16 possible initiatives for vote

Initiatives agreed today

Early Implementation Critical

Working group date/agreed

Immediate or Phased implementation thereafter



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Engineering & Construction



**SP ENERGY  
NETWORKS**

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**Lunch**

**Welcome back**

Craig McDougall

SPEN Major Projects Delivery Manager

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# **Control of Personal Exposure to Crystalline Silica**

**Ceirán Trow, CMFOH,  
Group Occupational Hygienist**

# Introduction

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- Why be concerned about exposure to Crystalline Silica?
- Breathe Freely campaign
- Health effects from exposure to Crystalline Silica
- Practical Control Measures
- Summary

# Why be concerned about Crystalline Silica exposures

- Exposure to Crystalline Silica has occurred for centuries, and the health effects from such exposures known for almost as long. So why the interest now?
- 13,000 deaths per year related to health conditions contracted as a result of exposure to hazardous substances in the workplace.



# Why be concerned about Crystalline Silica exposures

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A significant proportion of these deaths are attributable to past asbestos exposure, however another significant proportion will be as a result of cancer,



Lung cancer is a notable one, caused not only as a result of exposure to asbestos, but also Crystalline Silica among others



# Breathe Freely

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- It is known that the Construction Industry has an increased risk of it's workers being exposed to hazardous dust due to the nature of the work.
- The BOHS, in collaboration with the HSE and large construction companies are trying to raise awareness on the wider issues of the causes of occupational lung disease.



# Health Effects: Silicosis

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- Silicosis is a nodular fibrotic pneumoconiosis, that causes scar tissue to develop on the lung, ultimately reducing lung function.
- There are three types of silicosis:
  1. **Acute:** can develop within a few weeks/ months of exposure,
  2. **Chronic:** Takes between 10 to 30 years of regular low level exposure. Often identified on the upper lung with the potential for extensive scarring.
  3. **Accelerated:** Tends to develop within 10 years of high-level exposure. PMF
- Silicosis is a known pre-cursor to lung cancer.



# Control of exposure to Crystalline Silica

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- There are a number of tasks that can generate exposure to dust containing a range of contaminants including Crystalline Silica



 **Silica dust**

The law requires companies to make sure staff are breathing in levels of Silica dust well below the amount illustrated here.

- The current Workplace Exposure Limit (WEL) for silica is down to  $0.1\text{mg}/\text{m}^3/8\text{Hr TWA}$ .
- To achieve this requires thought and a determination, identified through prior assessment of the hazard and risk.

# Control options

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- The basic principals for control should be the starting point for all environments:
  - Elimination / substitution.... Not always possible or practical!
  - Engineering controls
  - Administrative controls
  - PPE, Inc. RPE.



# Control Cont.

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- Dust suppression



- On tool extraction



# Control Cont.

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RPE:

- Some classic shots!



# Beard Facts

Stroking of beard increases concentration, cognitive ability

Filters the air of toxins, pollution, and stray food

Natural bear-repellant when camping or wandering in the woods

Science has shown that beards rarely sleep

Acts as a homing beacon attracting the jealousy and admiration of the beardless

Beards are almost completely immune to sarcasm

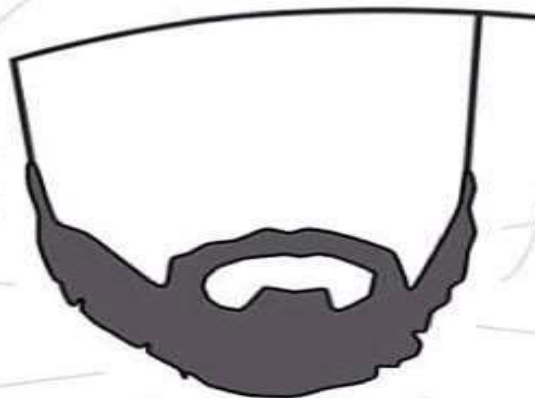
Dramatically increases your wood-chopping capabilities

Quadruples handsomeness

Lets you instinctually know where the nearest mountain is

Fits on your face

DOGHOUSE DIARIES



# How does dust hurt you?

## Chronic Obstructive Pulmonary Disease

COPD, also called Chronic Obstructive Airways Disease (COAD), a blanket term for 'obstructive' lung conditions like bronchitis and emphysema. Reduces airflow out of the lungs. HSE estimates 15-20 per cent could be work-related.

## Asthma

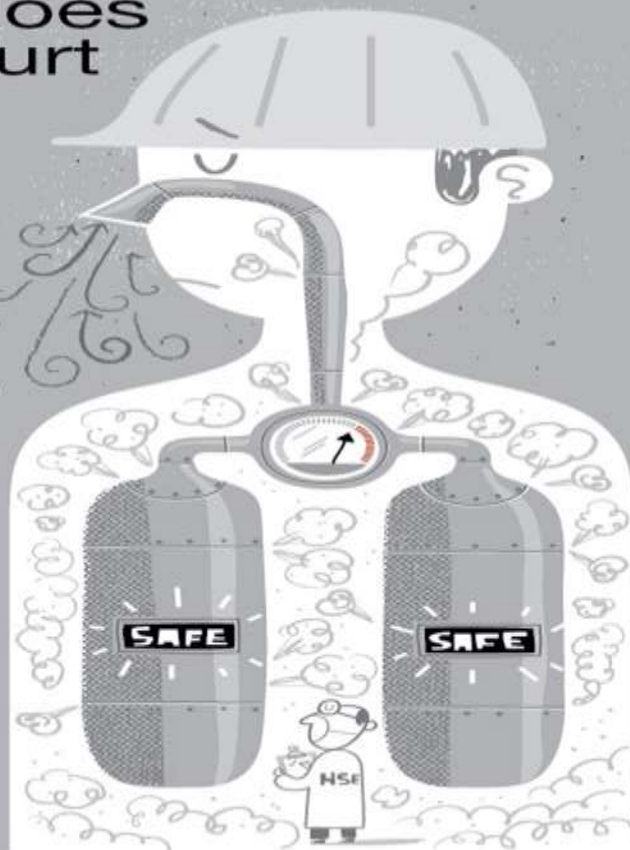
Another obstructive lung disease, linked to exposure to irritants or allergens ('sensitisers') at work. A reversible shortness of breath, between 15 and 20 per cent of all cases are work-related.

## Extrinsic allergic alveolitis (EAA)

An allergic condition which affects workers exposed to biological dusts, causing conditions including farmers' lung and pigeon fanciers' lung.

## Fibrosing alveolitis

Also known as pulmonary fibrosis, can be caused by some occupational dust exposures, for example work with cobalt or 'hard metals' in cutting tools. Related conditions, for example 'flock workers' lung' and 'popcorn lung' (Hazards 104), have been discovered recently.



## Pneumoconiosis

A group of 'restrictive' lung diseases like silicosis, talcosis and asbestosis, where dust exposure causes debilitating lung scarring.

## Cancers

Tumours, particularly of the lung and nose, are related to substances commonly encountered at work including asbestos, silica, chrome VI, nickel, cadmium and wood dust. These account for thousands of work-related deaths each year.

## Heart disease

Dust-affected lungs put extra strain on the heart, which can lead to right-sided heart failure. Some occupational exposures, like hard metal dust, can cause potentially fatal conditions like cardiomyopathy. Very fine dust particles cause inflammation of the heart and a higher risk of heart attacks.

## Other problems

Exposure levels half the level allowable for most workplace dusts overwhelm the body's first line of defence, the 'mucociliary clearance' that filters out dust in the upper respiratory tract. This can leave the worker more vulnerable to infections and more susceptible to occupational lung disease. Lots of other dust-related conditions occur, some specific to particular exposures; beryllium is linked to sarcoidosis, chrome dust to chrome ulcers.



# Summary

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- Exposure to Crystalline Silica is not new, neither are the control methods available to limit exposure.
- To meet the WEL in a busy construction site takes a determination, best achieved not only from an assessment of hazard and risk, but through an understanding of the health effects:
- Silicosis is
  - Predominantly a chronic condition
  - It is disabling to the affected individual
  - It is not reversible and can be progressive
  - It can lead to cancer.

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# Vehicle and Plant Safety Critical Rules Feedback

Brian Dunn

Barry Hughes

## Next Steps

- Vehicle & mobile plant forum to drive positive change & share learning.
- Follow up meeting scheduled for 21<sup>st</sup> March at Delain House, Cumbernauld to close off Safety Critical Rules and implementation.



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# Q&A

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## Summary & Close

**Date for Diary - Next Forum 12<sup>th</sup> Sept 2017**

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# **Contractor Health and Safety Forum**

## **7<sup>th</sup> March 2017**