

PROJECT SAFETY MATTERS

APS | THE ASSOCIATION FOR PROJECT SAFETY




ISSUE 5 | Spring 2018

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PROJECT SAFETY MATTERS



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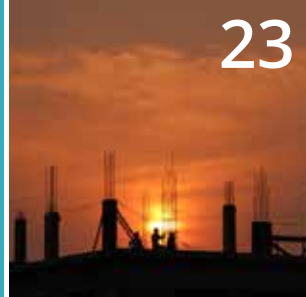


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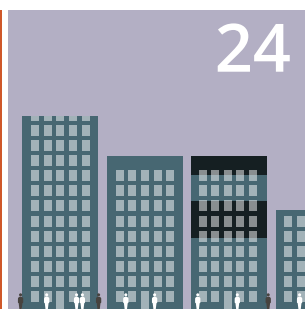
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CEO'S FOREWORD

Spring has finally arrived with its hopes of new life and fresh starts. This edition of Project Safety Matters explores much of what's new and innovative in construction health and safety risk management. But that's not all you'll find in this edition of your quarterly APS membership magazine.



Lesley McLeod

I ALWAYS THINK of May as the month of national parks and gardens. It is stately home heaven with the bank holiday weekends that bookend the month. So the piece on how to deal with anthrax in historic buildings is a timely reminder that many of you are not dedicated to work in the bright and shiny, chrome and glass world of the ultra-modern and corporate. There is plenty of work to be done to renew and improve our existing building stock and to preserve our historic built environment. But working on projects where you are not starting with a clean slate comes with its own particular risks and challenges. From complex building consent to – that staple of the country-house detective story – the statue falling from the balustrade on to the victim below there are health and safety consideration to bear in mind.

But the fear of falling masonry is unlikely to keep me at home. Hopetoun House, on the shores of the Forth to the west of Edinburgh, is a stunning example of the architect's art. From its grand facade you can see the sweep of the three Forth Bridges. The new bridge is extraordinarily elegant - its shape echoes the iconic rail bridge complementing the 1960s suspension bridge. The article on the Partner Safety Network highlights how co-operative working can bring health and safety rewards. Just look at the numbers: the original bridge had a human cost of around seventy-three and there were seven deaths on the first road bridge. The new bridge almost came in with a clean sheet although, tragically, there was one fatality. And one is one too many which

is why, as a community, we must explore all the new safety tools we have in the bag.

APS has been at the centre of the new BIM standard on sharing information. I was in London for its launch in April and our president, Bobby Chakravarthy, has contributed a great article for this edition on how PAS 1192-6 affects architects and designers. We also have a user discussing how the standard changes things on the ground.

Certainly BIM helps visualise risks. It isn't just something for the young although construction certainly needs

fresh blood. You'll also get a feel for how the sector is trying to attract and develop new talent in our feature on apprenticeships.

And let's remember it's not just about accidents. There's still a long way to go to improve the health of those engaged in construction. This twin approach will be celebrated in this year's APS annual and student awards. We've already received some entries - so why not make May time 'must-make-time' to get your entry in too.

Lesley McLeod
APS CEO

COMMUNICATIONS

FREE LEGAL ADVICE

Members can email legal questions or problems for consideration by our construction legal advisors, Fladgate LLP. This is a FREE service for most members.

Email your enquiry to:

info@aps.org.uk

Subject: Legal advice

FREE TECHNICAL HELPLINE

You can call the APS office to register a technical helpline query with our panel of experts or for membership enquiries.

Call: 0131 442 6600

LinkedIn

www.linkedin.com/groups/3713591

More than 1,000 APS members now connect and share on the APS LinkedIn Group. We urge you to join the growing community of APS members. This is an invaluable forum that allows you to connect with other members, share problems, good practice, experience and knowledge. It also enables you to tap into important debates and issues concerning the development of APS and our role within the industry.

NEWS FROM THE REGIONS

DOUBLE FIRST FOR SCOTLAND NORTH

SCOTLAND NORTH Regional Committee held their first CPD event in 10 years to a packed-out audience. It was also the first APS CPD event that was held at no-charge to APS members.

Twenty two delegates attended the talk on asbestos awareness at Safehands in Lossiemouth, organised primarily by Scotland North committee treasurer, Andrew Gardner.

The training was delivered by Paul Davies, CDM Advisor at Safehands supported by Andrew Gardener who also works there.

The new Scotland North committee, who got together last year after it had lapsed, provided members and non-members with lunch followed by three hours of training with each delegate getting six CPD points for the afternoon. Alistair Norrie, chair, Scotland North said, 'we clearly hit the mark as far as the delegates were concerned. Despite the geographical challenges of this part of the UK, we still managed a full audience thanks to the combination of high-quality training as an inclusive benefit'.



Paul Davies, right, with delegates

Upcoming events Look out for the following:

Date	Region	About
31 May	Scotland North	Carbon Dynamics
13 June	Midlands	Building Regulations

Look out for the following...Dates soon to be confirmed!

Date	Region	About
TBC	Northern Ireland	Working at Height
TBC	North West	Principal Contractors Duties
TBC	Yorkshire	BIM in CDM

APS MEMBERSHIP AND THE NEW DATA PROTECTION REGULATION

On the 25th of May this year the General Data Protection Regulation (GDPR) becomes law.

The change is to ensure that legislation in place is fit for purpose, giving individuals greater protection and rights over the data held about them by organisations and businesses.

We'll soon be writing to tell you about your rights under the new legislation and what APS is doing to ensure the safety of the data we hold about you.

We may also need to ask your permission to get in touch with you about some of our services. Make sure you look out for these questions so you don't miss out.

25TH MAY



GDPR



CONSTRUCTION INDUSTRY ADVISORY COMMITTEE (CONIAC): **ACTING TOGETHER TO SAVE LIVES**

Against the background of the 2015 Construction Regulations, industry practitioners are working with the HSE and government as CONIAC, the Construction Industry Advisory Committee and voice of construction organisations and workers, ensuring they have a voice when advising on health, safety and risk in construction.

MORE THAN 2 million people work in the construction industry - around 7% of Britain's workforce. The industry has a total turnover of over £296 billion and is dominated by smaller firms with more than 84% having no employees.

Construction work ranges from large, high-profile projects like Crossrail or Thames Tideway undertaken by major principal contractors, to small refurbishment projects in shops and homes or domestic roof repairs by self-employed builders.

How dangerous is construction work?

Although there have been significant reductions in the number and rate of fatal incidents and work-related ill-health and injury over the past decade, construction remains hazardous and high-risk, accounting for almost 30% of all fatal injuries to workers.

In the five years up until March 2017, nearly 200 construction workers died and many thousands more

received life-changing injuries. Each year around 80,000 construction workers suffer from an illness they believe was caused or made worse by their work, including musculoskeletal disorders (MSDs), skin or respiratory conditions and depression, stress or anxiety.

Most fatal incidents involve small businesses, and nearly half of all reported injuries occur during refurbishment

activities, where there can be a lack of awareness of even basic health and safety standards. The work is also peripatetic in nature, employment is often short term and there are high levels of self-employment, sometimes as part of the informal economy. At this end of the industry, some practices, attitudes and equipment are as bad as those that would have been seen more than 20 years ago.

Given the higher risk environment and often hazardous nature of the work, what is being done to lower the rate of fatalities, injuries and work-related ill-health in the construction industry?



The regulatory framework

For the HSE, construction continues to be a priority sector. In April 2015, the Construction (Design and Management) Regulations 2015 (CDM) came into force.

The regulations cover the full process of managing health, safety and welfare during the delivery of a construction project from concept, through design and build to handover and future use of a structure. They emphasise the importance and influence that each duty holder – client, designer and contractor – has on the way that construction risks are identified and controlled throughout the life of all projects.

Sustaining the downward trend in work-related injury and ill-health

The HSE is tackling the rate of fatality and injury in the construction sector through the inspection of sites where information indicates serious health and safety risks are not being controlled. Areas of particular attention include refurbishment and smaller construction projects, where standards are often poor.

Clients and designers lead on design construction work so are best placed to design out the health and safety risks before construction starts. Clients and designers can face enforcement action when they have not done all they can to ensure that the project can be being carried out without risk to health or safety.

CONIAC

However, it isn't just the HSE which is tackling the risks in construction – the industry is ensuring that its organisations and workers have a voice too.

The Construction Industry Advisory Committee (CONIAC) is made up of industry organisations (clients, designers, contractors and unions) and advises HSE and the wider government on industry issues relating to health and safety. CONIAC acts as the public face and voice of the construction workforce, and ensures we are all actively involved in identifying the risks and their solutions.

CONIAC is organised around five working groups which represent the themes of HSE's Helping Great Britain Work Well strategy; Tackling ill-health; Managing risk well; Supporting small employers; Keeping pace with change; and Sharing our success.

The chairs of each group form a steering group which is focussed on helping the industry, particularly small businesses, achieve improved risk management and control.

In December 2017, HSE extended this industry involvement even further with the launch of the wider stakeholder network, the Construction Industry Advisory Network (CONIAN), set up to promote engagement with workers through their representative organisations, and to provide organisations with direction on managing construction risks well.

Online community

A new CONIAN online web community was launched in January 2018 which allows public access to the purpose, work and benefits that CONIAC brings to all construction workers and to provide a simple facility where all workers can access information and help reduce risks on their projects.

You can access CONIAC at:

<https://webcommunities.hse.gov.uk/connect.ti/coniac/groupHome>

The HSE recognises that it is only through acting together, that Great Britain can further improve the health and safety record in the construction industry and move towards a safer, healthier, better skilled, more productive and smarter future.



HOW A **PARTNER NETWORK** HELPED BRIDGE THE FORTH SAFELY

Karen Campbell is Health and Safety Manager for the Employers Delivery Team (EDT) on the Queensferry Crossing, the new bridge spanning the Forth estuary in Scotland. She works for Jacobs and has worked on the project since 2015, originally as the Health and Safety Advisor for the EDT before her current post. In this interview she tells us about the challenges of working on such a large project with some many people involved.



Karen Campbell

What is your involvement in the Queensferry Crossing?

I am the main point of contact between the EDT and the Principal Contractor, Forth Crossing Bridge Constructors (FCBC) (Forth Crossing Bridge Constructors) for all health and safety matters.

Although the bridge is completed, there were and still are a large number of organisations involved in this project which must be challenging from a health and safety perspective. How do you manage this?

Overall there are seven contractors and hundreds of subcontractor companies from a range of different countries. There are differences in attitudes to health and safety due to cultural differences and standards which may have been in place in home countries. The sheer number of workers involved in a project of this scale – over 12,000 inductions have been held to date – also presents a huge challenge.

To overcome these issues workshops were held at the start of construction. They involved everyone in the overall project sharing best practice and information to decide how to address the inconsistencies in the health and safety cultures. The workshops led to the creation of a Project Charter which was developed and signed by all partners, committing to one health and safety policy. The Principal Contractor created a bespoke safety culture specifically for the project and the Bridging the Forth Safely initiative was born with the aim to have all partners embrace a Safety Partner Network.

How did the Safety Partner Network actually function?

The Safety Partners are health and safety champions. They work in tandem with the Principal Contractor's standard site supervision to reinforce its work and bolster the bespoke health and safety culture. They support and educate on site by engaging in positive safety conversations and influencing behaviours on site in a positive manner. Safety

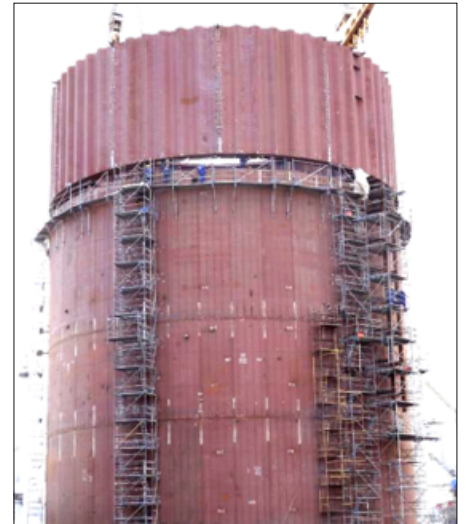
Partners take the time to praise well managed works and have discussions on how tasks can be improved to ensure greater safety for all those involved or affected

Has the Safety Partner Network been successful?

Complex tasks have been (and are) meticulously planned and then executed extremely well. Standard or more mundane tasks have at times been more problematic, particularly those that are repetitive as this is where complacency can creep in. I feel that this was and is an ongoing education, particularly with the challenge of the volume of subcontractors involved in such a complex project. Attitudes have differed toward the idea of a Safety Partner Network however the EDT have worked hard to maintain our consistent approach whilst motivating and encouraging our Safety Partners. It has been successful in making it clear that safety comes first and is a top priority across a diverse range of tasks, people and organisations, with this message coming from the top level of management in FCBC and the EDT.



“ Attitudes have differed to the idea of a Safety Partner Network however the EDT have worked hard to maintain our consistent approach whilst motivating and encouraging our Safety Partners.”



ANTHRAX IN HISTORIC BUILDINGS

By **Cameron Miller** MBA APAEWE CMAPS FRICS C Build E FCABE



Cameron Miller

If you are working in a historic building or environment, it is possible that anthrax may be present. The risk is small, but you still need to make sure proportionate measures are in place to that risk. This article talks about the different strains of anthrax what you need to do to protect yourself and others.

HAIR FROM ANIMALS (such as ox, cow, goat and horse) has been used in internal plaster for centuries. When working with old plaster, there is a perceived risk of anthrax spore contamination, where infected animal hair was used to bind the plaster.

Externally, it is possible that previous land uses may present an incidental risk to construction workers. Old farms, anthrax burial sites, tanneries or woollen mills may contain anthrax spores.

Crypt clearances involving the opening of coffins containing people who have died of anthrax may present hazards to those carrying out the work; however, those arising from anthrax are slight.

Simple, effective precautions and good hygiene practices are adequate to maintain risk at a negligible level and satisfy the requirements of the Control of Substances Hazardous to Health (COSHH) Regulations 2002 and the Construction (Design and Management) Regulations 2015.

In reality, the risk of contracting any form of anthrax while carrying out works to an historic building is exceedingly low. No case is known of occupationally-acquired infection among construction workers.

Anthrax and forms of infection

Anthrax is a potentially fatal infection caused by the bacterium *Bacillus anthracis*. It is a disease of livestock that can be transmitted to humans from infected animals, their hides and other products. In rare instances,

infection can be fatal; in the United Kingdom, anthrax is extremely rare.

When blood from an infected animal comes into contact with air, the bacteria form spores which may persist within the environment for many years. For humans to contract anthrax, it is understood that exposure to the organism in large numbers is essential.

In humans, anthrax takes one of four forms, cutaneous, pulmonary, intestinal and injection, dependent upon the transmission route. Cutaneous is the most common type, accounting for 95% of all cases. Each form has differing signs and symptoms. In most cases, symptoms develop within seven days of exposure to the bacteria, however pulmonary anthrax may take weeks to appear.

Cutaneous anthrax

Cutaneous anthrax is transmitted through skin lesions (cuts and abrasions) or puncture and is contracted through handling material



containing spores from infected animals, the products of those animals or from the contaminated environment. This is the mildest form and with appropriate treatment, is seldom fatal. Signs and symptoms include a raised itchy bump resembling an insect bite which quickly develops into a painless sore with a black centre. There may be swelling in the sore and nearby lymph glands.

Pulmonary anthrax

Pulmonary (or inhalation) anthrax develops through breathing in anthrax spores. Even with treatment, this form is often fatal. Initial signs and symptoms include flu-like symptoms, mild chest discomfort, shortness of breath, nausea, coughing up blood and painful swallowing. As the disease progresses, high fever, trouble breathing, shock or meningitis may be experienced.

Intestinal anthrax

Intestinal anthrax is contracted by eating undercooked meat from an infected animal.

Injection anthrax

Injection anthrax is the most recently identified route of infection (through injecting illegal drugs).

Incidence of anthrax

Human cases of anthrax within the UK are exceedingly rare. The only death in 40 years was that of a musician, who is believed to have contracted pulmonary anthrax from imported raw animal hides. There have been no reported cases of anthrax in construction workers in the same period and so the risk of acquiring the disease is very low.

Those who have contracted anthrax have been handling animals and their products, such as raw hides, wool and carcasses.

Risk management

The Control of Substances Hazardous to Health Regulations (COSHH) require that employers should not carry out work that is

liable to expose employees to substances hazardous to health until all risks have been evaluated and minimised. COSHH provide a list of issues which employers should include and consider for their assessment to be deemed suitable and sufficient, including:

- The potential for the substance to cause harm
- The physical attributes of the substance, its ability to become airborne and come into contact with skin
- Details of how and when exposure can occur and who may be affected, including workers and others

The purpose of the assessment is to allow decisions to be made about the measures needed to prevent or manage the risk of infection. Matters to consider include:

- Establishing practical control measures
- Providing training, instruction and information
- Monitoring exposure
- Carrying out health checks

It is possible that historic plaster may contain anthrax, introduced through the use of infected animal hair. If infected hair is present, there is a potential risk of infection from cutaneous or pulmonary anthrax.

In considering the risk of infection and the measures needed to manage that risk, one would ordinarily identify the hazard. Extensive sampling would be required to confirm the presence of anthrax in plaster and the scale of sampling would cause considerable damage.

As an alternative, anthrax may be assumed to be present and proportionate controls put in place to manage that risk. Many of the control measures are good practice and would be recommended irrespective of the potential presence of anthrax.

Control measures for historic plaster

The following control measures are proposed to avoid transmission of bacteria through skin lesions or inhalation:

- Cover cuts, abrasions and other wounds with waterproof dressings
- Keep hands and fingernails clean and avoid hand to mouth / eye contact
- Wear protective clothing (gloves, overalls, eye protection)
- Avoid making dust or wear an appropriate mask
- Wash hands well before smoking or eating
- Keep workplaces clean and dust free
- Ensure first aid kits are to hand and contain waterproof dressings

If old plaster needs to be removed, handle and dispose of as contaminated waste.

Control measures for historic buildings

Anthrax may be assumed to exist in other parts of historic buildings. For instance, horse hair lagging of pipes in roof and floor voids may have caused contamination. The control measures proposed for working with historic plaster would be adequate to control the risk of infection.

Control measures for contaminated land development

It is possible that previous land uses may present an incidental risk to construction workers and to the general public. Old farms, anthrax burial sites, tanneries or woollen mills may contain anthrax spores. Testing may give an indication of contamination, however this is not certain. It is better to assume the presence of anthrax and adopt proportionate control measures, paying particular regard to good hygiene.

Control measures for crypt clearances

Whilst coffins may contain spores from the anthrax victim and from animal products used in padding to linings (e.g. horse hair), the risk of contamination from anthrax is slight. Historic England's advice is that while there are minor concerns about anthrax, the risk has almost certainly been over estimated. Anthrax spores may possibly survive, but with low infectivity.

Several infectious agents may be present, however those of most concern are leptospirosis and tetanus; fungal spores may be present in high concentrations. Further hazards may also exist, such as lead lining to coffins.

The control measures proposed for working with historic plaster would be adequate to control the risk of infection from anthrax during crypt clearances. Further control measures may be needed to control the risk arising from other hazards

Crypt clearances are a specialist activity which is regulated by a great deal of legislation. The specialists providing this service are best placed to advise on precautions needed.

Conclusion

The risk to construction workers from the potential presence of anthrax in historic buildings or contaminated land is minimal. Whilst an assessment of risk is required under the Control of Substances Hazardous to Health Regulations 2002, the measures required to maintain risk at a negligible level represent basic good practice in construction and include avoiding creating dust and maintaining good hygiene.

There is also minimal risk of anthrax infection arising from crypt clearances and this too is avoided with simple, effective precautions and good hygiene.

Further guidance

Health and Safety Executive publication HSG174 Anthrax: Safe working and the prevention of infection.

Health and Safety Executive publication HSG 066 Protection of workers and the general public during development of contaminated land

Public Health England Guidance on assessing the risk of anthrax on building land

Historic England (formerly English Heritage) technical advice note Anthrax and Historic Plaster: Managing minor risks in historic building refurbishment

Control of Substances Hazardous to Health Regulations 2002 (as amended)

Institute of Field Archaeologists, Technical Paper No.3, Margaret Cox; Crypt Archaeology: An approach

Historic England (formerly English Heritage) guidance for best practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England

Further information and advice on anthrax in historic buildings is available from Cameron Miller, Principal Designer, Purcell, 15 Bermondsey Square, Tower Bridge Road, London SE1 3UN

Email: Cameron.Miller@PurcellUK.com

Web: www.PurcellUK.com

THE APS NATIONAL CDM AWARDS ARE OPEN TO ALL WHO WORK IN CONSTRUCTION

Judged by leading industry figures and APS, the National CDM awards showcase innovation and exemplary practice in design and construction health and safety risk management and highlight how this can cut the number of workers who lose their lives, suffer life-changing injuries or are affected by long-term health problems.

THE AWARDS CEREMONY will take place on Wednesday 12 September at the Stoller Hall in Manchester. We welcome submissions from individuals and project teams from any background, no matter how big or small the company. Submissions should relate to work primarily carried out during 2017, or for an example of organisational change where the majority of effort or impact took place in the calendar year 2017.

Awards categories

- Principal designer of the year
- Designer of the year
- Client of the year
- CDM consultant of the year
- Digital innovation award
- Health, safety and wellbeing initiative of the year

Principal designer of the year

An effective principal designer plans, manages, coordinates and monitors health and safety issues in the pre-construction phase. For this award, judges are looking for projects that showcase proportionate and effective design risk management (taking into account buildability, maintainability and usability issues) and the effective engagement of all relevant parties.

Designer of the year

The 'principles of prevention' should be at the heart of good design practice. As far as reasonably practicable, designers eliminate, reduce or control risks associated with the construction, maintenance and use of their designs; this includes taking an effective and proportionate approach to sharing

information about residual risk with others. For this award, judges are looking for examples of design decisions, at any scale, that showcase the range of creative, technical, communication and process skills associated with addressing health and safety alongside other factors influencing design (such as aesthetics, cost, environment etc).

Client of the year

Judges are looking for a construction client that has shown clear, consistent leadership and commitment to core CDM principles on one or preferably several projects. These principles include clear and considered project briefs, ensuring the provision of full and relevant pre-construction information, strong leadership of the design team with health and safety set as a key driver. Clients who have been actively involved in encouraging and rewarding excellence, and embracing the ethos of CDM 2015 will be acknowledged for their leadership.

Submissions from third parties are encouraged but must include an endorsement from the client.

CDM consultant of the year

A competent consultant provides technically accurate, clear and proportionate support services to construction duty holders. Consultants can improve health and safety outcomes associated with all phases of projects (pre-construction, construction, maintenance and use, demolition) and their input might be associated with management arrangements, specific technical or design risk challenges or performance monitoring. For this award, judges are looking for work that showcases the best in support services.

Digital innovation award

Digital technology has the potential to revolutionise the construction industry. It looks at the latest innovations and advancements in areas such as BIM and Big

“The whole experience has been incredibly eye opening and has really motivated us.”



Data etc. The digital innovation award rewards applicants whose projects or initiatives embrace these new technologies.

Health, safety and wellbeing initiative of the year

This award recognises initiatives that have successfully advanced health, safety or wellbeing standards. Entries are welcome from across the sector and the focus of interest can be at any scale. For example, the initiative could be at the level of project, organisation or theme. Judges are looking for work that showcases creative and effective approaches to raising standards; applicants must be able to show how the initiative's impact has been measured.

The judges

The APS national CDM Awards judging panel consists of representatives from:

- ICE
- CIAT
- APS

Important information

- Download an entry form from www.aps.org.uk/awards-0
- Entries must complete the relevant application form and submit evidence by Monday 4 June.
- Entries may be submitted by any member of the project team provided consent from the client has been obtained.
- APS reserves the right to use images and project details submitted for publicity purposes.

- You may apply for multiple awards, provided that an application form is submitted for each category.
- Shortlisted projects will be required to produce an A3 poster which will be displayed during the awards reception.
- The decision of the judging panel is final.
- Supporting evidence must include high-resolution photographs. It may also include any location, site or layout plans, sections etc.
- Elevations, details and sketches, as appropriate, to assist the judging panel's decision.
- Any other evidence to support your submission such as awards, feedback etc.

THE ASSOCIATION FOR PROJECT SAFETY IS PLEASED TO ANNOUNCE ITS NATIONAL STUDENT DESIGNER AWARDS 2018 WITH **A TOTAL PRIZE FUND OF £3,000**

THE APS National Student Designer awards are intended to encourage continuous improvement in design and recognise excellence in design and construction risk management within the architectural professions. The awards are open to all construction-related design students. The awards scheme is intended to introduce them to the issues of buildability, maintainability and usability and their responsibilities as designers in terms of construction health and safety risk management.

The award

A total prize fund of £3,000 will be awarded as follows:

1st PRIZE £1,500
2nd PRIZE £1,000
3rd PRIZE £500

Details of the winning entries for the previous years, which demonstrate the quality of submission anticipated, may be viewed on the APS website at:
www.aps.org.uk/awards-0

The Brief

Students should outline how their thought process, during the development of their design project, contributed to the elimination of risks in the construction, maintenance and eventual deconstruction of the building.

Submissions should be approached from the perspective of a principal designer (as defined in the Construction Design and Management Regulations 2015) and taking into account the 'Principles of Prevention'.

Where risks cannot be reasonably eliminated, students should consider innovative ways in which the risks can be reduced/managed. Further advice, regarding issues that students should consider when preparing their designs, is given on the APS website.

“Go for it if you are lucky enough to have the opportunity. What do you have to lose?”



Entry requirements

- Entries should be selected from the student's portfolio of studio design projects completed within the current academic year.
- Submissions must be made online at www.aps.org.uk/enter-the-student-awards
- Submissions should include an A3 poster board (electronic format). Images should be in high resolution jpeg or pdf format only.
- Graphic presentation skills are also important and will be taken into account in the judging process. Accompanying notes on drawings are an excellent way of demonstrating how risks to health and safety have been managed and diagrams showing sequence of construction are also useful in explaining safe methods of construction. For example, sketches showing the method of accessing external elevations for maintenance and cleaning also demonstrate the students' understanding of managing risks after the construction stage.
- Entries must demonstrate buildability, maintainability and usability together with a good understanding of the concepts of construction health and safety risk management. Winners will be announced



at the prestigious awards ceremony following on from APS' flagship event of 2018; the National Conference.

About the Association for Project Safety (APS)

APS is a professional membership body offering guidance and support to members in all areas of construction health and safety risk management. APS aims to continuously improve and promote the professional practice of design and construction health and safety risk management. The association plays a leading role in helping members meet the many challenges of implementing and complying with their duties and obligations effectively and proportionately while maintaining a focus on health as well as the prevention of accidents and injuries. It facilitates quality training and education for experienced industry professionals as well as students and those at the start of their careers. It also works with other professional bodies and key third parties to maintain and improve industry standards and practice. Student membership is free and open to any individual in full-time education of any discipline in the construction industry.

Upon graduation, student members will be invited to progress through the APS membership structure.

Benefits of student membership include:

- Access to the student area of our website where copies of our practice notes, our membership magazine (Project Safety Matters) and best practice examples are downloadable free of charge;
- Discounted publications;
- Entry to regional CPD events free of charge;
- Notification of national CPD events;
- Enhanced CV giving students a commercial advantage when looking for employment.

Association for Project Safety, 5 New Mart Place, Edinburgh EH14 1RW

The judges

The judging panel will be made up of representatives from the Royal Institute of British Architects, the Chartered Institute of Architectural Technologists and APS.

"Absolutely astounded and honoured to have won - thank you APS. I got to meet a number of award sponsors and clients. I would encourage anyone to apply."

FIRST PRIZE

Simon Ward,
Northumbria School of Architecture

"It was amazing; to be nominated was great but to win was wonderful."

NATIONAL STUDENT DESIGNER AWARD FOR INNOVATION

Liam Greene,
Sheffield Hallam University

HEAR FROM THE 2017 NATIONAL STUDENT DESIGNER AWARD WINNERS

1st Prize winners



Left to right, Raheela Khan-Fitzgerald, Bobby Chakravarthy and Justina Jakubkaite

Raheela Khan-Fitzgerald and Justina Jakubkaite, The Mackintosh School of Architecture, Glasgow School of Art

How did you find out about the APS Student Designer awards?

We found out about the APS Student Designer awards through our university, the Mackintosh School of Architecture, Glasgow School of Art.

What made you decide to enter?

We really wanted to showcase our cutting-edge research based on safe, well-designed and sustainable self-build construction technologies to our fellow students and the wider world of construction professionals.

What was your project about?

Hutting in Scotland is a joint research project investigating the limits of technology for self-build off-grid hut construction in Scotland. The aim of the study was to design and showcase the integration of specified off-grid services and energy use for a hut

alongside safe self-build construction methods addressing time, budget and quality.

How did it feel to be shortlisted?

Unbelievable! We would never have imagined receiving such supportive recognition at this early stage in our education and careers. The whole experience was incredibly eye-opening and has really motivated us.

What would you say to anyone considering entering?

Go for it! Design for safety in building construction and use is lacking acknowledgment in education even though it is one of the first and foremost considerations in our profession. From our own experience, we feel any student who has touched on this subject deserves their due recognition.

2nd Prize winner



Damion Allport

Runner Up



Aaron Folkes

Damion Allport, School of Architecture/Architectural Technology Birmingham School of Architecture and Design

How did you find out about the APS Student Designer awards?

I was nominated by my technology tutor last year.

What made you decide to enter?

Well I wasn't sure whether I would to start with, but it was really nice that my work was considered good enough for submission for a national competition, so thought, what do I have to lose? Never thought for a moment I would actually be shortlisted, let alone be awarded second Place.

What was your project about?

The proposal for Morecambe Town Hall creates a typically open-plan building that consists of a series of spaces radiating from a central core with a level of public, semi-public and private hierarchy to the layout. It looks to resemble the existing condition along the Esplanade with undulating glazed facades and over sailing timber canopies horizontally, as well as the diverse 'roof-scape' vertically.

Morecambe is a town that has had to redefine itself to survive with less 'Kiss Me Quick' and more 'Frankie & Benny's'. Significant importance is attributed to the status of the Promenade and Esplanade, however, the Esplanade does not give the impression you would expect from a traditional seafront despite how clichéd or tacky it may be considered.

Instead the Esplanade was populated with common-place businesses that had the feel of a regular high street rather than a vibrant and energetic seafront. As such it seemed crucial that a building representing the town followed this evolved trend and was located on the Esplanade itself as an extension of the town's core, like reclaiming land from the sea.

The use of materials within the construction is not only an environmental consideration, but more in keeping with the evolved Morecambe, providing a building that feels more sympathetic and comfortable to its environment while still suggestive of the town's luxurious past. The final design looks

to incorporate itself within this landscape of isolated structures along the sea front, creating an amalgamation of interconnected internal spaces within a singular structure forming Morecambe Town Hall.

How did it feel to be shortlisted?

Really pleasantly surprised, it was great to know that I had been awarded something at all as this was a national competition and I have never been involved in anything like this before. I was happy enough to make the short list regardless where I came in the end.

What would you say to anyone considering entering?

I would always say go for it if you are lucky enough to have the opportunity, what do you have to lose? You never know what may happen and if you are successful it's a great experience to be part of and something you can be proud of in the future.

Aaron Folkes, Birmingham School of Architecture and Design

How did you find out about the APS Student Designer awards?

My university introduced me to the APS Student Designer Awards, as part of our technical resolution module.

What made you decide to enter?

The opportunity to showcase how health and safety is being considered and integrated into education, helping to inform the next generation of designers on the considerations required throughout the design process.

What was your project about?

An affordable housing scheme in a dense inner city borough of Birmingham, looking to encourage social cohesion and diversity through the manipulation of thresholds. This agenda resulted in a dynamic and complex

proposal for the dwellings, and considerable contouring of the site.

How did it feel to be shortlisted?

Being shortlisted was an absolute honour. There is no better recognition of the work you have produced.

What would you say to anyone considering entering?

Enter! The award recognises your contributions to the profession, even within an academic context. Student designers are the future, and integration of health and safety at an early stage is critical to ensuring safety both during construction and when the building is in occupation. As an extra bonus, the awards are also a fantastic night out.

“ Student designers are the future and the integration of health and safety at an early stage is critical. The awards are also a fantastic night out.”

SCAFFOLDING AND ACCESS: THE GOOD, THE BAD AND THE UGLY

The National Access & Scaffolding Confederation (NASC) is the national trade body for access and scaffolding in the UK – established 1945 – and now serving over 250 leading contracting firms, scaffolding suppliers and manufacturers. It provides a wide-range of safety and technical guidance accepted as the industry standard by the HSE, Build UK, CITB and principal contractors alike.

Stephen Allen-Tidy, NASC Health and Safety Advisor, answers our questions about good practice, bad practice and some recommendations for ways of working.

What are the most common health and safety issues for scaffolding and access?

All NASC members must provide detailed information about reportable accidents which we publish in our annual Safety Report. Our most recent report shows that in 2017 there were only 89 incidents suffered by the NASC's 233 members (who employ 16,400 people) and no fatalities.

Analysis shows that slips, trips and falls were the main cause of accident and injury for the thirteenth consecutive year and represented a third of all reported injuries. While we are pleased that the number of accidents is so small, and that the incidence and frequency rates are at all-time lows, we are assessing how we can help members to reduce this number in the future.

What is the best example of good practice you've ever seen?

Forward planning is key to a well-run and safely managed scheme or contract and this needs to happen at the procurement stage. The Principal Designer should ensure that the client arranges for third party or other principal contractor audits to take place to assess the on-going application of safety arrangements. This should cover the clients' duties that are carried out by the principal contractor

such as welfare facilities and site inductions and could also include the design of the scaffold, for example, the creation of a TG20:13 Compliance Sheet for scaffolds and follow on scaffold inspection reports.

A number of stand-out scaffolding projects were recognised at the NASC 2017 Ball. These include work at the New Wear Crossing, Sunderland (Interlink Scaffolding Ltd), 100 Liverpool Street, London (TRAD Scaffolding Co Ltd), and Kresen Kernow, Cornwall (Chris Sedgeman Scaffolding Ltd). All of these projects incorporated the highest standard of project and health and safety management that is expected from NASC members.

What is the worst example of bad practice you've ever seen?

Fortunately, instances of severe bad practice – particularly those that could result in serious injuries or even fatalities – are on the decline however recently a scaffolder was prosecuted for working dangerously while erecting scaffold on the Crown Prosecution Services building.

This experienced scaffolder was photographed standing on scaffold boards 60 feet up without having first erected a guardrail to stop his fall, as outlined in the free NASC Safety Guidance SG4:15.

The HSE prosecuted the employee for working dangerously and ignoring all the safety practices and training given by his employer by putting his own safety at risk as well as others. He received a 26-week suspended jail sentence, 100 hours community service and was ordered to pay costs of £615.

Is there a top consideration or an absolute 'must do' rule or practice you recommend?

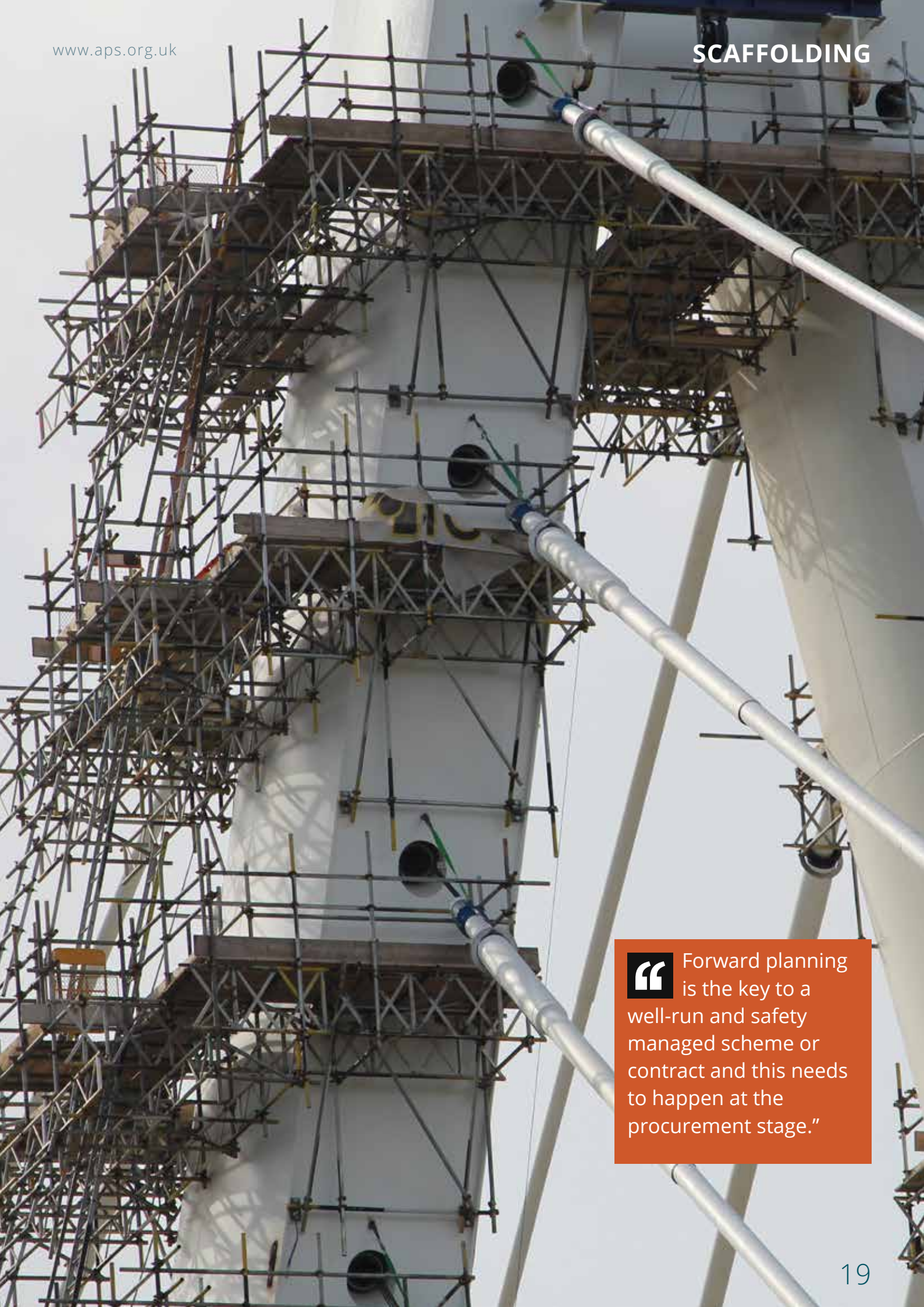
APS members undertaking the role of principal designer should identify and eliminate or minimise wherever possible any significant health and safety risks associated with the construction of their project, ensuring they meet their duties under CDM 2015.

If these significant risks cannot be eliminated and only controlled, such as the necessity for working at height, the PD working with the client and principal designer should procure skilled, experienced and knowledgeable contractors.

What are your top four recommended practices?

1. When planning on working at height, engage the services of the trade associations and federations belonging to the Access Industry Forum, of which the NASC is a member.
2. Ensure that design safety reviews are carried out and recorded for projects under CDM 2015.
3. Record actions to any agreed changes to the design on the Design Safety Hazard Register.
4. Procure contractors that can demonstrate that they have the experience, knowledge, skill and training required to undertake high-risk activities.

For more information please visit www.nasc.org.uk



“ Forward planning is the key to a well-run and safety managed scheme or contract and this needs to happen at the procurement stage.”

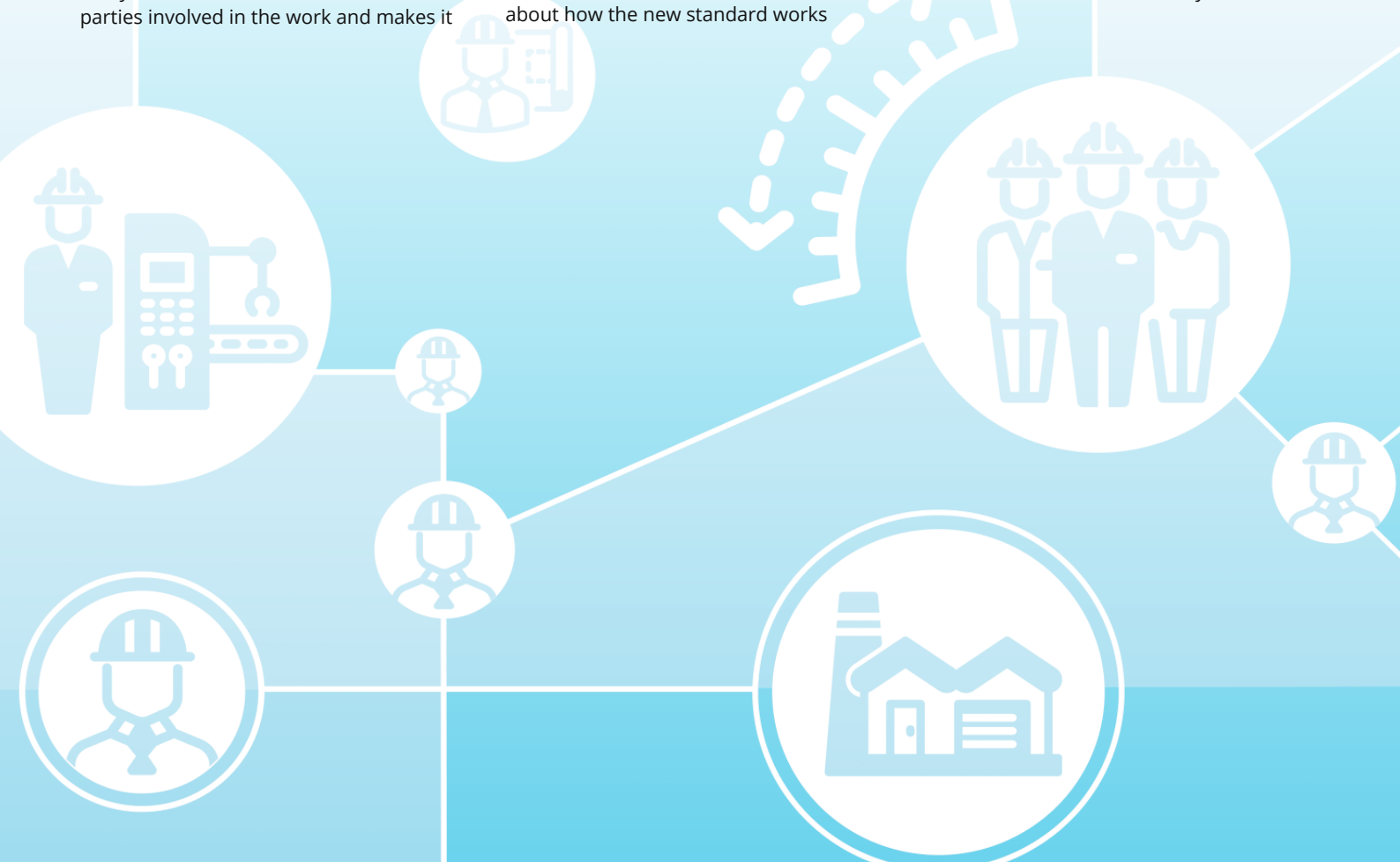
Managing risk shouldn't have to involve anyone being in any danger so it is vital that the construction industry continues to find ways to assess the health and safety impact of projects before they even leave the drawing office. That is one of the key reasons the APS is full square behind the development of the new PAS 1192-6 standard. APS has been supporting the work and we were delighted to attend its public launch at the Institution of Civil Engineers in London on 17 April 2018.

The standard uses BIM 4D modelling to help designers of all descriptions walk their way through construction projects and to visualise the things which could go wrong. For the first time it links health and safety information to physical risk and shows how logistics and construction can all be managed together. It crucially lets everyone share their information with all parties involved in the work and makes it

The standard has been a long time in the making but it has been one of the fastest shifting downloads from the BSI website since it went live earlier this year. The printed version costs £60 and is available from the BSI shop but it can be downloaded free at <https://shop.bsigroup.com/ProductDetail?pid=000000000030347710>

straight from the mouths of the technical authors. We have been lucky enough to have Peter Nicholas and Nicholas Nisbet host one of our APS webinars and their talk will stay on the members' site so you can view it when and where suits you best. We will be following up with a summary fact sheet to give non-experts the gist.

As an aside, we are delighted to report our new APS webinars are going down a storm. Look out for our June session from Gillian Birkby who, following the aftermath of the Carillion collapse - will be telling you how to ensure you are not the victim if a creditor is in financial difficulty.



DIGITAL INNOVATION

Why we should invest in the future of health and safety and digital innovation.

Current state of play

If this is to be a period of prolonged downturn in construction activity while we await the outcome of Brexit and all its challenges, I am always mindful that if we are not careful we will see a return of the 'race to the bottom' bidding mentality in construction that normally accompanies an economic downturn. The construction sector is also behind in terms of productivity gains. A myriad of reports show that in the last two decades, productivity in construction is lagging when compared to manufacturing. The construction industry is, however, also a troubled one and has been dogged by many concerns for some decades. The industry is characterised as being risk-averse, resistant to change and not very innovative. Compared to other industries, construction exhibited alarmingly low productivity growth of only 1% over the last two decades. It is one of the least digitalised industries, with very low investment in R&D. This parallel between slow IT adoption and slow productivity gains is disturbing because construction is essentially a domestic business, difficult to trade and outsource as opposed to manufacturing. What is at stake here is the ability for our industry to deliver a high level of quality, sustainable buildings, infrastructure and more importantly fit for purpose.

Reinvention of construction

A number of forces are pressing for change and there are calls for a 'reinvention of construction'. The construction industry is indeed ripe not just for change, but for a much more serious disruption. For obvious reasons everybody is focussed on BIM and its benefits and implementation but the real change will come from a range of emerging technologies, including those which will enhance digitalisation and automation of the industry as well as new materials and will act as catalysts for disruption. These emerging technologies which are already starting to become mainstream will have a transformative impact on the industry and contribute towards addressing the challenges it faces such as the Grenfell disaster. The disruption will, however, change the nature of the industry and brings huge opportunities for those who seize

them. If you combine the new technologies with methodologies derived from the manufacturing world – lean construction, volumetric construction, robotics, site process optimisation and data management – and you have gathered all the ingredients for a paradigm shift in the industry. If embraced, such an approach will transform productivity across our industry, saving potentially billions of pounds. This is design, engineering and construction as it should be. A shift that will impact productivity more significantly than anything done in the last two decades and provide resilience to future challenges and downturns.

Pace and shape of change

Change will happen and it is just a matter of time. Essentially, the speed at which it happens will depend on how fast the industry will organise itself to leverage new technologies such as data transformation, Information Analytics (IA), Artificial Intelligence (AI), the Internet of Things (IOT) and on how fast technology will adapt to consider the specific nature of the industry. The pace of change will also depend on outsiders such as Google and Amazon populating and competing within the space, and upcoming technologies such as block chain would provide a shift from gathering data and reporting on data to use of data in meaningful ways to inform good design and construction. The benefits and positive impact this would have on health and safety management on projects will be immense and could decentralise the whole industry and make it ripe for development of new and meaningful tools to meet health and safety objectives.

Taking part in change

I am already starting to notice that a number of progressive companies in the construction industry are riding the next wave. They are digitalising and are adopting innovative business practices and emerging technologies. At the same time, the impact of the emerging technologies may also pose risks and threats for industry laggards who fumble the future. Mark Farmer's prediction of "modernise or die" is even increasingly a real prospect. Hence this is not a time for companies in the construction industry,

professional bodies, governments or those who are considering entering the industry, to be complacent. This however needs renewed effort from both the government and industry leaders to wake up to the potential transformative benefits of innovation and help deliver a standardisation of digital tools and methods in construction. Realising the benefits of these developments will become easier the more they are adopted. Professional and membership bodies have an important role to play in not only engaging, modernising and training the existing workforce but also to make them fit for purpose to compete in an ever increasingly globalised world.

It's important at APS that we firmly stand behind every opportunity with capabilities that can support innovation and change in a positive direction and create an impact in construction health and safety. We also recognise the importance of technology and its evolution, in not only enabling the digitisation of the construction processes but also adding greater value in making it safer by way of better collaboration among all parties to the construction process. We have been an important stakeholder in the development and evolution of PAS 1192 -6. We see it as a collaborative effort to embrace and develop digital processes. It sets out a clear pathway, leveraging the benefits during the early stages of the design process, mitigating and designing out risk at source, and showing how health and safety information can be used and shared by all the stakeholders in the construction process from inception to completion. We hope that this is a first step in the right direction for the industry and opens up opportunities to our members to enhance and provide a better service to their clients and projects.

It is evidently clear that every organisation and every individual in the construction industry will be impacted, sooner or later. In this ever-shifting environment on the brink of significant innovation we are making sure that APS has a place and it is worth asking you: where do you stand?

Bobby Chakravarthy
APS President

BIM TECHNOLOGY

Martin Emery is an Associate Director for Health and Safety, at Faithful+Gould, a global project and programme management consultancy. He has used BIM technology as part of the principal designer role for three years spanning his current role and his previous role. He tells us about his experience of using BIM, the advantages it has and how he sees it being used in the future.



Martin Emery

How did you start using BIM?

I was working on a couple of projects subject to the government's mandate that they be delivered in BIM Level 2 by April 2016. Around the same time I was working with a number of forward-thinking private sector organisations who included BIM delivery in their project specification.

How do you use BIM technology currently?

We are able to 'walkthrough' the model as part of the hazard assessment process, and include visual representations of hazards on the model. Clash detection and model review sessions are used as informal health and safety workshops and we can also work with the design team and the BIM co-ordinator to use BIM as a tool to develop the CDM action tracker which is tied into the visual representations of risk on the drawings.

What are the advantages of using BIM?

From a purely health and safety point of view BIM allows for greater collaboration across the design team. It gives us the chance of getting designs right first time, saving time and money and reducing the need for unexpected work on site. It enables us to pick up things that won't work and when this is tied into 4D BIM (when you link a construction programme to the 3D model) it is possible to really drill into the buildability and the practicality of the structure and spot programme clashes with health and safety implications early on.

It is also much more straightforward to identify health and safety issues as you can visualise the structure – and this is really significant, as modelling highlights aspects of access and maintenance, as well as construction, that are not immediately obvious in a 2D drawing. At the end of the project the client can be given a model that contains residual risk information that can form part of their asset management programme but it also has a huge benefit for the contractor. They can take the model and use it to plan construction sequences and understand safety around site logistics.

It also benefits the principal designer, allowing them to track compliance with the designer's duties, as it helps to keep health and safety at the forefront of the designers' minds. When hazard and risk information is set out in the format used in PAS 1192-6, Revit, the modelling software used by the designer, can take all the relevant risk information from a federated model and drop it into a spreadsheet that can be used to track actions. This can then be reviewed, say, weekly, as part of the clash detection sessions.

How do you see BIM evolving within the construction industry?

It's important to state that BIM is not new. Lots of the things I'm talking about have been around for a while but there are a few things I would like to see happen more frequently. I'd like to see an increased use of virtual reality (VR), in design and at the construction phase. When you can walk through the model using a VR headset it is a truly immersive experience and you can

really get a feel for how a building will work. I think that there will be a growth in site inductions using this technology with a focus on hazards that might exist on site

I'd also like to see greater use of 4D BIM – this will really help with buildability matters and better integration of BIM with the health and safety file, so that it can be taken forward through the entire lifecycle of the building and used successfully by the facilities management team.

There needs to be a greater understanding of what BIM actually requires and what it can deliver. Currently a number of clients are asking for a project 'to be delivered in BIM' whilst not fully appreciating what this means, or what is required to allow this to be successful.

For larger schemes I would also like to see health and safety forming a greater part of the BIM execution plan – this will help drive up standards and help get PAS 1192-6 embraced by the industry.

The real challenge will be getting BIM implemented on smaller schemes where there could still be benefits, such as accurate site geometry gained from 3D surveys and automated tracking of drawing revisions. BIM reduces the likelihood of simple human error: a significant benefit when we think about health and safety.

APPRENTICES PROVIDE KEY SKILLS TO THE CONSTRUCTION INDUSTRY

Construction isn't just about hard hats and hi-vis. There are more than two million people in various construction jobs, meaning it's one of the biggest and most diverse sectors in the country.



Mark Noonan

THE CONSTRUCTION INDUSTRY Training Board (CITB) is the largest provider of construction apprenticeships in Britain. In 2016 we supported around 8,400 employers to train more than 24,600 apprentices.

During this year's national apprenticeship week, CITB announced strong construction apprenticeship starts from across Great Britain.

Since 2012 the figure for those joining a construction apprenticeship has continued to rise steadily each year from 17,528 in 2012 to 26,195 in 2016 – 2017, a rise of 49%. This is the highest figure since the present way of recording apprenticeships began in 2003.

This record high has shown that construction remains a key career choice for young people. Our 2017 report, *Changing Perceptions: The growing appeal of a career in construction* showed that One-in-four young people (28%), have given construction careers the thumbs up by awarding the sector top marks for attractiveness.

This figure has more than doubled from 13% in 2016, and is a very welcome and significant rise from just 3% in 2015.

Changing Perceptions: The growing appeal of a career in construction is based on a survey of 1,000 young people, 500 parents and 800 guidance career professionals. The findings show an improvement in the perception of construction careers among all of the groups surveyed.

Mark Noonan, Industry Relations Director at CITB, said: "Great efforts have been made recently to promote construction careers, with initiatives like Inspiring Construction and Open Doors. At the same time major projects and the Government's apprenticeship drive are helping to raise construction's profile.

"Perceptions of construction careers are improving. With modern methods of construction emerging fast, the time is right for industry to work together to start bringing new people into the sector."

Apprenticeships will play a key role in training the next generation of construction employees. Our recent Construction Skills Network forecast predicts that over 150,000 construction jobs are set to be created across the UK over the next five years. The infrastructure and housing sector are helping to drive growth.

Download the Construction Skills Network UK report for 2018–2022 (pdf 1.69 MB)

CSN figures show employment is projected to grow for the fourth consecutive year at 0.5% a year on average to 2022. This would take employment in the industry to 2.77 million in 2022, only 3% below the 2008 peak.

Mark Noonan continued: "The construction industry has long supported apprenticeships as an excellent way of developing skills within the sector. The increase in construction apprenticeship starts is testament to the work industry is

doing to showcase construction as a great career choice. Go Construct, the sector-supported website, has become a useful resource for young people, parents and career advisors to find out more about careers in construction. Initiatives like Open Doors also help to break down the barriers and dispel any myths about our industry.

"While the overall picture for apprenticeship starts looks good at the moment, there is no room for complacency. We now need more employers to step forward to offer apprentices places so that they can start a rewarding career in construction, with up to £10,250 of CITB grant funding available to employers for every apprentice they employ."

To find out more about a career in construction visit: www.goconstruct.org

“ With modern methods of construction emerging fast, the time is right for industry to work together to start bringing new people into the sector.”

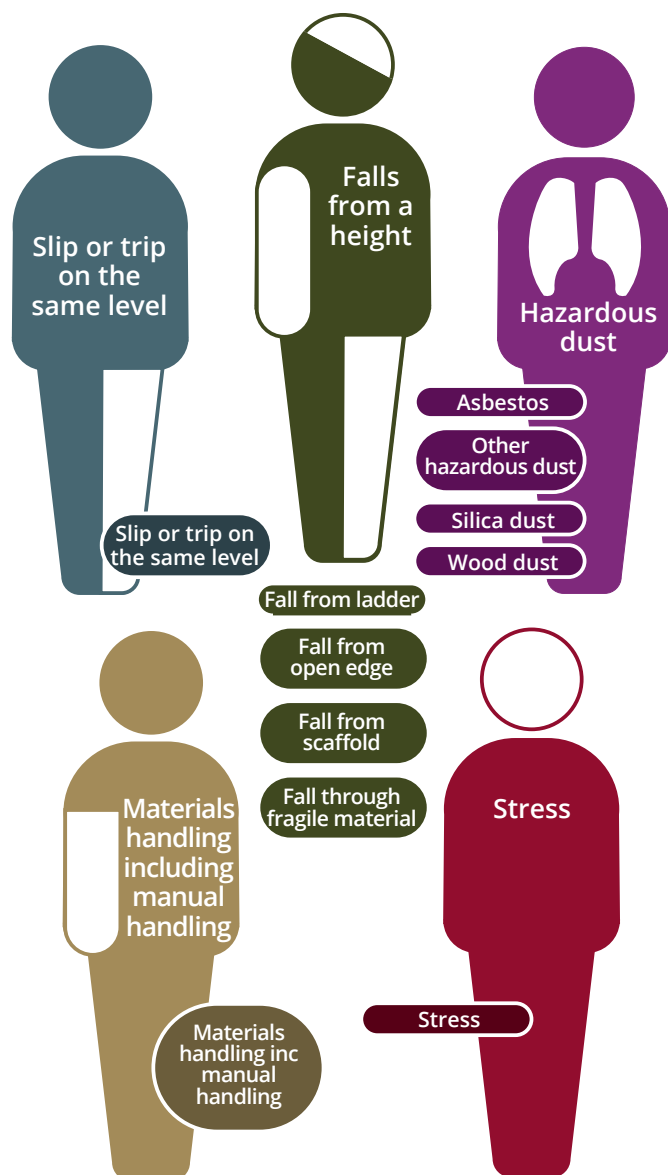


RISK IN CONSTRUCTION

This infographic is the first output of an exciting project that could bring the benefits of big data and data mining techniques to bear on construction health and safety.

PREVENTABLE RISK EXPOSURE

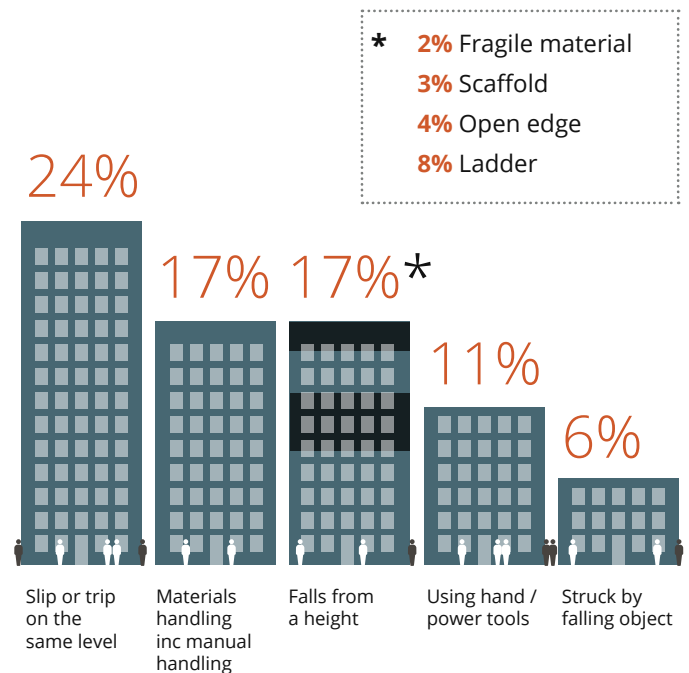
Focus on 5



IMMEDIATE CONSEQUENCES

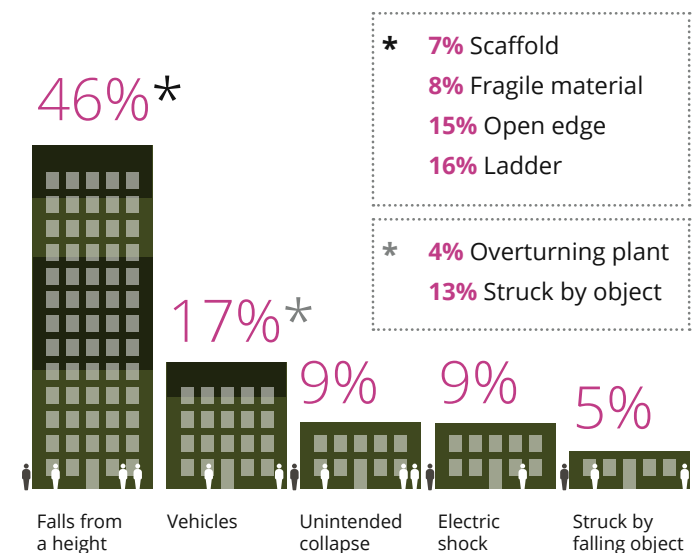
Risk profile injury top 5

Using a 1,000 sample of the RIDDOR data (2011-2017)



Risk profile fatality top 5

Using 5 year RIDDOR data (2012/13-2016/17) - 196 deaths

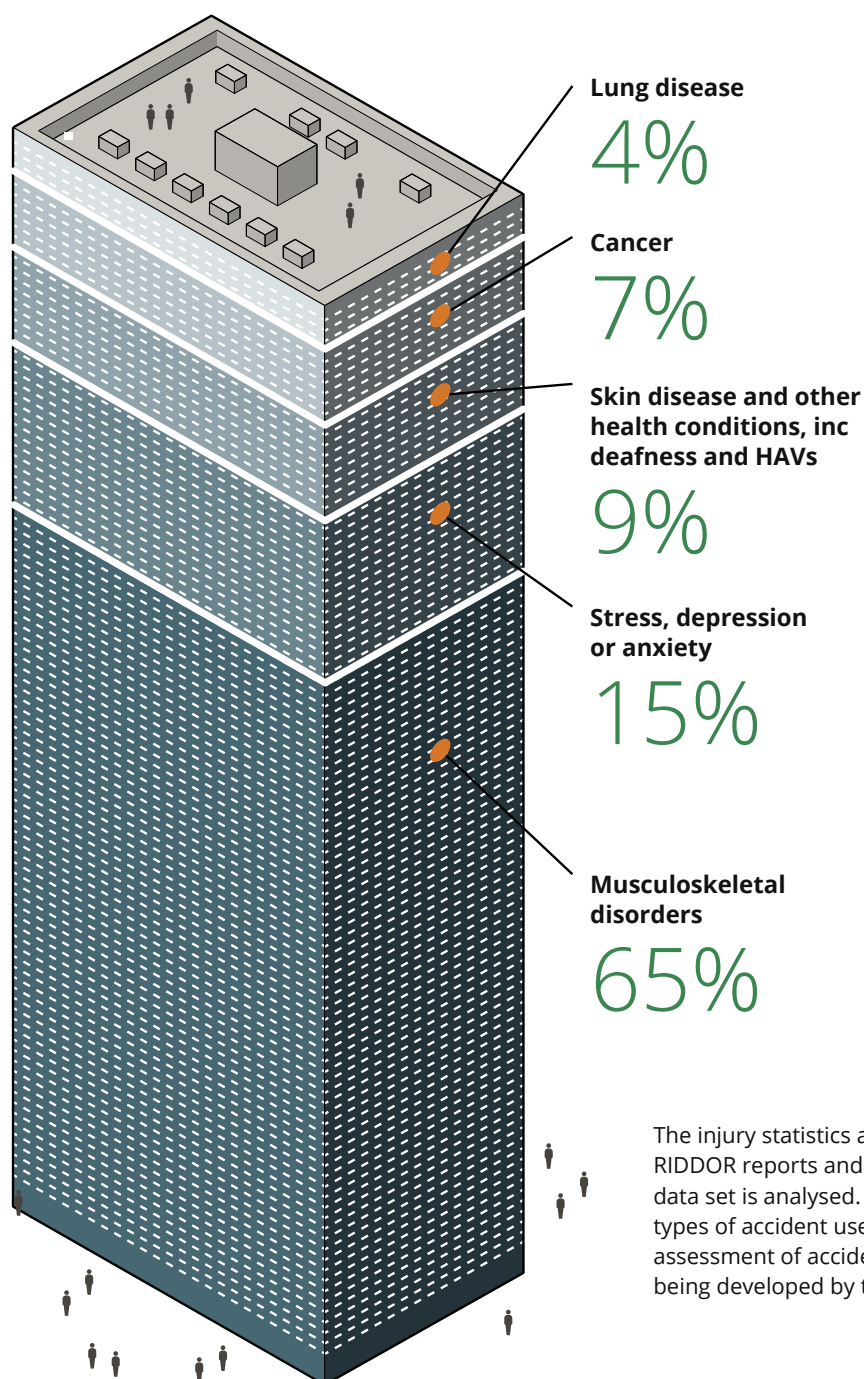


DELAYED CONSEQUENCES

Ill health

Each year around **80,000** construction workers in Great Britain suffer from an illness they believe was caused or made worse by their work

Source: Labour Force Survey, 2014/15–2016/17



The injury statistics are preliminary findings from 1,000 randomly selected RIDDOR reports and consequently the figures may change when the full data set is analysed. The risk profile does not reflect the self-reported types of accident used in official HSE statistics, but instead is a novel assessment of accident causation using a classification system currently being developed by the HSE construction division.

The HSE's Construction and Science Division is using a new technique in developing a construction industry risk profile. The aim is to provide a more complete picture of risk than has been previously available. The project is mining existing accident report data and analysing it against more detailed range of risk categories. For example, instead of using a single 'fall from height category' the analysis matches data against one of five sub categories: 'fall from ladder', 'fall through a fragile roof', 'fall from scaffold', 'fall from an open edge', 'MEWP operations'. The project is developing new techniques to automate the recovery of risk categories from 'free text' reports created in the course of accident reporting and investigation. Whilst it is initially focusing on HSE internal data, future work will seek to enable triangulation of data against other sources.

This is an exciting development that is anticipated to lead to an openly available online tool that will enable Industry to interrogate and interpret data, paving the way for more effective interventions. Watch this space.

WHY FORWARD-THINKING HEALTH AND SAFETY MANAGERS ARE FOCUSING ON MENTAL HEALTH

The potential impact of mental ill-health is well established, especially in the construction industry where employees are at a higher risk of suicide than falls¹. Forward-thinking health and safety managers are increasing their focus on health and mental health in particular. They can play a pivotal role in improving the happiness and productivity of staff by being aware of what is happening in their organisations, knowing what support is available, selecting what's appropriate and promoting it to staff.

Why it is critical for health and safety managers to focus on the mental health of staff

A recent government review estimates that the UK economy is negatively impacted by mental ill health by over £33² billion per year³. Understanding the current situation, identifying triggers for stress, training managers, reviewing support available, putting in place any new support needed, and encouraging workers to utilise that support, health and safety managers can play an important role in nurturing better mental health in the workplace.

Although mental ill-health isn't increasing, our ability to cope with it is diminishing. Evidence suggests that more people are self-harming and having suicidal thoughts. Despite this a culture of silence still remains. Recent research revealed that 80% employers² reported that none of their employees had disclosed a mental health condition, and that 30%³ of employees wouldn't feel able to talk openly with a line manager if they were stressed.

Health and safety managers have an obligation to tackle this issue. The culture of silence must be addressed and employees need to be offered mental health support as standard. Thankfully the

government's Stevenson Farmer Review into mental health did acknowledge that green shoots of good practice are emerging in UK workplaces.

Suicide is a higher risk than the more obvious physical risks associated with this sector, so it's positive to see health and safety managers being proactive about mental health in the workplace, especially in the construction industry. However, many health and safety managers will need to seek advice about the breadth of support that is available in the market to meet this urgent need.

How can health and safety managers protect employees?

There are four key things that health and safety managers can do to help.

Find out what is happening now in the organisation

Firstly, it's important to understand the current situation. This will enable them to provide effective support. We have seen clients use targeted employee surveys as a really effective tool to help them understand the mental health landscape of their organisation and this is a solid starting point which can help to identify what type of support is the most appropriate.

Equip line managers

Line managers play a crucial role in supporting their staff, so it's also a good idea for companies to arrange specific mental health training for them. It is critical to create an environment where staff are encouraged to talk to their manager about mental health issues and to equip managers so that they are able to recognise potential issues and know how to respond, signposting employees to further relevant support if necessary. This helps to break down the taboo of mental ill-health and helps them deal confidently with mental health issues.

Review what is already available

It is also very worthwhile for health and safety managers to review the mental health support that is built into existing employee benefits packages. Many employee assistance programmes will include mental health support, some will provide 24/7 helplines, and many offer face-to-face counselling too. Group risk protection benefits and private medical insurance can also include mental health support. Specialist advisers can give guidance on the most appropriate support for each company.

Help employees access appropriate support

Health and safety managers also have a role to play in ensuring mental health support is adequately communicated and promoted to staff. Promoting and encouraging its use can play an important part in overcoming some of the stigma.

By understanding the current situation, identifying triggers for stress, training managers, reviewing support available, putting in place any new support needed, and encouraging workers to utilise that support, health and safety managers can play an important role in nurturing better mental health in the workplace.

1 <https://www.thebesa.com/news/workers-six-times-more-likely-to-die-from-suicide-than-falls/>

2 www.gov.uk/government/uploads/system/uploads/attachment_data/file/658145/thriving-at-work-stevenson-farmer-review.pdf

3 www.mind.org.uk/workplace/mental-health-at-work/taking-care-of-your-staff/

PROHIBITION NOTICES: WHEN IT'S WORTH APPEALING

An HSE Prohibition Notice can be daunting, because it has all kinds of implications – but is it a good idea to appeal against one? A recent case suggests that just occasionally, it may be.



Gillian Birkby

AS WE KNOW, health and safety inspectors have very wide powers and various options available to them which are exercisable at their discretion following an inspection. These powers include serving a Prohibition Notice when they consider that there is a risk of serious personal injury. The consequences of ignoring a Prohibition Notice are severe; in the Wymondham Quarry case, a director received a nine-month jail sentence for failing to comply with two Prohibition Notices.

In a recent case involving Chevron North Sea, a health and safety inspector served a Prohibition Notice following an inspection of an oil rig in the North Sea operated by Chevron, which took place in April 2013.

The HSE Inspector, Mr Conner, was accompanied by three colleagues with specialist expertise relevant to the particular parts inspected. As a result of the inspection, they concluded that the stairways and stagings that provided access to the rig's helideck had been so badly affected by corrosion that they were unsafe, and that there was a risk of serious personal injury from someone falling through them. Mr Conner served a Prohibition Notice on Chevron.

Health and safety legislation imposes a duty upon all employers to ensure the health, safety and welfare of all

employees, and there are similar powers of enforcement in relation to a workplace. The Prohibition Notice procedure was still relevant in this case, even though the Chevron operation was an offshore oil rig in the North Sea, and thus not covered by the CDM regulations.

Having launched an appeal against the Prohibition Notice to the Employment Tribunal, in July 2013 Chevron arranged for the metalwork that caused the concern to be removed from the installation and tested. The results of the testing were set out in an expert report dated March 2014. It concluded that the metalwork in question passed the British Standard strength test, so there was no risk that someone would fall through it. Chevron's appeal against the Prohibition Notice sought to rely on the report's findings.

When considering the appeal, the Employment Tribunal considered that it was entitled to take into account all available, relevant evidence – including information that had come to light after the Prohibition Notice had been served. The Prohibition Notice was cancelled on the basis that the findings in the report were relevant to the issues in question and demonstrated that the corrosion did not give rise to a risk of serious personal

injury. The HSE appealed this decision up to the Supreme Court (the former House of Lords), which agreed with the Employment Tribunal that there was no good reason to restrict the information to that which was available at the time of the inspection.

However, the Supreme Court also made it very clear that this judgment was not a criticism of Mr Conner's decision to serve the Prohibition Notice, and that he had done nothing wrong in doing so. They acknowledged the fact that a decision often has to be taken as a matter of urgency, and without the luxury of comprehensive information available. They also stated that there was no reason for an inspector to be deterred from serving a Prohibition Notice following this judgment, and in fact suggested that an inspector should now actually feel less inhibited about serving a Prohibition Notice as they could be confident that if it came to light that there was in fact no material risk, the position could be corrected on appeal.

Nevertheless, Chevron's appeal against the Prohibition Notice was a lengthy process. The initial inspection took place in April 2013 and the judgment of the Supreme Court was given on 8 February 2018. The practical, economic and reputational consequences of a Prohibition Notice should never be underestimated. A record of every Prohibition Notice is retained on HSE's public database for five years; it remains an effective power to be exercised against organisations which put people at risk. However, following Chevron, it is clear that there can be appeals against perceived risks that do not, according to later evidence, actually exist.

Gillian Birkby
APS Legal Adviser

ISO 45001 IS NOW PUBLISHED

The world's much anticipated International Standard for occupational health and safety (OH&S) was published in March and is set to transform workplace practices globally.

ISO 45001:2018, Occupational health and safety management systems – Requirements with guidance for use, provides a robust and effective set of processes for improving work safety in global supply chains. Designed to help organisations of all sizes and industries, the new International Standard is expected to reduce workplace injuries and illnesses around the world.



illnesses across the globe.” The new standard will help organisations provide a safe and healthy work environment for workers and visitors by continually improving their OH&S performance.

Because ISO 45001 is designed to integrate with other ISO management systems standards, ensuring a high level of compatibility with the new versions of ISO 9001 (quality management) and ISO 14001

(environmental management), businesses that already implement an ISO standard will have a leg up if they decide to work toward ISO 45001.

ISO 45001 will replace OHSAS 18001, the world's former reference for workplace health and safety. Organisations already certified to OHSAS 18001 will have three years to comply with the new ISO 45001 standard, although certification of conformity to ISO 45001 is not a requirement of the standard.

The International Accreditation Forum (IAF) has developed the migration requirements to help certified organisations, certification bodies, accreditation bodies and other interested parties prepare. For more information, see the IAF website.

ISO 45001:2018 can be purchased direct from the national ISO member: <https://www.iso.org/members> or through the ISO store.

This article has been adapted from one originally written for the International Organisation for Standardization (ISO) by Elizabeth Gasiorowski-Denis

According to 2017 calculations by the International Labour Organization (ILO), 2.78 million fatal accidents occur at work yearly. This means that, every day, almost 7,700 persons die of work-related diseases or injuries. Additionally, there are some 374 million non-fatal work-related injuries and illnesses each year, many of these resulting in extended absences from work. This paints a sober picture of the modern workplace – one where workers can suffer serious consequences as a result of simply ‘doing their job’.

ISO 45001 hopes to change that. It provides governmental agencies, industry and other affected stakeholders with effective, usable guidance for improving worker safety in countries around the world. By means of an easy-to-use framework, it can be applied to both captive and partner factories and production facilities, regardless of their location.

David Smith, Chair of Project Committee ISO/PC 283 that developed ISO 45001, believes the new International Standard will be a real game changer for millions of workers: “It is hoped that ISO 45001 will lead to a major transformation in workplace practices and reduce the tragic toll of work-related accidents and



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APS NATIONAL CONFERENCE AND AWARDS 2018

Health and safety risk management in major infrastructure projects

THE GOVERNMENT'S Construction 2025 strategy recognises the significance of the industry's impact on the UK economy and the nature of the investment in infrastructure that will be required. Major infrastructure projects present particular health and safety challenges and opportunities.

These challenges will be the subject of this year's APS National Conference. The programme brings together experts from transport, energy, digital infrastructure,

housing, commercial property and water to consider the issues from a range of perspectives, including those of SMEs.

Celebrate the best in health and safety design risk management

This year's conference will include our National CDM and Student Designer Awards reception in the evening. The awards are free to anyone attending the conference and take place after it is finished.

Prices

Members have until 31 July to book the APS National Conference and Awards at the reduced price.

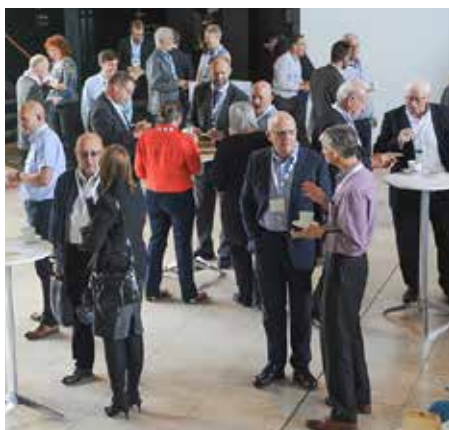
Members early bird price

APS member early bird - £160 plus VAT (before the 31 July)

Non Member - £220 plus VAT £190 plus VAT

Book now

Book your place by going to aps.org.uk then clicking on 'Events' and choosing 'Conference'.



THE PRESIDENT'S POSTSCRIPT

I rarely think much about my health. Unless I am feeling ill – which isn't often – I largely take being well for granted. But recently I was laid low – like so many people over this past winter – by a bad chest infection which simply refused to shift. And that served to highlight for me both the debilitating effect respiratory disease can have and the consequent need for the construction industry to keep on highlighting this and other health – as opposed to safety – issues.



Bobby Chakravarthy

I AM WELL AWARE that I just had a bad bug, but there are still far too many people across construction whose long-term health is damaged because of their employment in the sector. This is particularly the case with effects of the inhalation of dust and fibres but there are other core issues the sector needs to address as well.

The APS CPD 39 series, which looked at mitigating the adverse health effects of asbestos and lead, was well attended. And APS is not alone in looking at respiratory disease. The Health in Construction Leadership Group (HCLG) – in which APS participates – is looking at breathing problems as one of its key topics. The group is also looking at other health topics including hearing loss and musculoskeletal disease. APS is already looking at that and members can access training as part of their membership package.

Philip Baker's CPD41 sessions are going well but there is still a chance to book to attend. You'll find details at aps.org.uk/cpd-spring-2018 but don't worry if you are unable to go along in person as all CPD will now be available online to allow members to join in. There will also be a practice note and a summary factsheet to accompany each CPD session.

Continuing learning is vital, but I also believe the construction industry needs to look at ways of making it easier for people to protect their own health. And this is one of the reasons I am such a keen advocate for BIM.

I love the way BIM allows people to visualise the way things will look and how it helps tackle risks without the dangers that real-life scenarios involve. APS has been very involved in recent developments in BIM standards and so I was delighted to be asked to speak at the launch of PAS 1192-6 – the specification for collaborative sharing and use of structured health and safety information using BIM. I accept it is hardly the snappiest of titles but the new standard does a very useful job of setting out how 4D modelling can help everyone involved on a project keep on top of health and safety risks.

If you haven't caught up with the new standard yet you don't have to miss out – it's all available on the APS website. The webinar is just one of the six online sessions APS will be hosting this year.

They form part of the new membership package we put in place earlier this year. So far you seem to think we're making things better at APS which was certainly

my aim for my Presidency. Relevance, access and a platform to shape and share good practice is very close to my heart and what drives my move to work across the industry and build strong and positive relationships with other bodies and organisations.

But, just as we need our friends, we all also need positive role models. The annual APS awards are looking for entries and I am hoping for a bumper crop to consider for our ceremony which will take place after the AGM and conference in Manchester on 12 September 2018. We already have a couple of early projects to look at so I am very hopeful we are on track. But that's no reason to be complacent so please, put on your thinking caps and consider sharing your projects with your peers and colleagues throughout the APS family. You have until Monday 4 June to get the entries in so there is no time to waste.

Which reminds me, I'd better encourage my own colleagues to get in an entry from Arcus. It would not do if I missed my own deadline.

Bobby Chakravarthy
APS President

CONTRIBUTIONS

We love to hear from you. As part of our new vision for APS we want more feedback from our members. If you have any thoughts or feedback on this edition or you would like to feature as a guest writer for the next edition of *Project Safety Matters* then please email our editor:

Rosalind Grozier,
Marketing and Communications
rosalind.grozier@aps.org.uk

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APS offers job and career advertising opportunities on the APS website. This service is FREE to APS corporate members and discounted for individual members. APS members can also advertise their services in our situations wanted section at no cost.

For full details of current jobs and how to advertise go to:
www.aps.org.uk/jobs

CHECK OUT OUR EXTENSIVE RANGE OF PUBLIC COURSES

CDM2015 FOR FACILITIES MANAGERS 1 DAY COURSE

This non-accredited course is designed to provide Facilities Managers, and designers and contractors working for Facilities Managers, with an understanding of their duties under the CDM Regulations 2015. Larger fit-out and refurbishment projects will be discussed as well as planned maintenance and reactive repair activities.

MANAGING SAFELY IN CONSTRUCTION 5 DAY COURSE

This IOSH approved course has been developed to provide managers, designers, etc. the knowledge and skills necessary to enable them to recognise the hazards likely to be present in the construction industry and the actions needed to control and manage them.



THE SYNERGY OF CDM2015 AND BIM 1 DAY COURSE

This non-accredited course is designed for clients, designers, principal designers, contractors and principal contractors performing duties under the CDM Regulations 2015 and are likely to perform these duties on projects that will comply

with the Building Information Modelling (BIM) requirements. This course would also be useful to facilities and asset managers who may be considering the benefits of BIM in managing assets.

ASBESTOS AWARENESS 1/2 DAY COURSE

This UKATA accredited course provides supervisors and trades personnel employees whose work could foreseeable disturb the fabric of a building and expose them to asbestos containing materials with the knowledge necessary to recognise where these materials may occur and the precautions/actions necessary. The course satisfies the requirements for training as contained in the HSE document, L143.



IN-HOUSE COURSES

All courses are offered as 'in-house' courses, where the trainer presents the course at a venue provided by the delegates' employer, and are priced at a daily rate.

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APS ACCREDITED COURSES



MANAGEMENT OF PRE-CONSTRUCTION HEALTH AND SAFETY 3 DAY COURSE

This APS accredited course is aimed at those persons who will be performing the duties of the Principal Designer on behalf of their employer, who has been appointed to this role by the Client.

It provides knowledge on the requirements, methods that could be used to achieve these requirements, the personal qualities necessary and additional services that could be offered by the Principal Designer.

DESIGN RISK MANAGEMENT AND CDM2015 FOR DESIGNERS 2 DAY COURSE

This APS accredited course is aimed at Designers and Design Risk Managers, providing a full understanding of the Designers' duties under CDM2015 and the options that are available for achieving these obligations. The course could also be suitable for Principal Designers.

CDM2015 AWARENESS 1 DAY COURSE

This APS accredited course is designed to provide all persons involved in construction projects, including current and potential clients, project managers, principal designers, designers, principal contractors and contractors with a broad overview on the CDM Regulations 2015.

FOR FURTHER INFORMATION ON THE ABOVE COURSES & OTHER AVAILABLE COURSES:

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