

# THE FUTURE OF OCCUPATIONAL HEALTH AND SAFETY

THE VISION OF 15 PROFESSIONALS





## INTRODUCTION

**Occupational health and safety** is important for so many reasons, not only is it linked to a **reduction in absenteeism, costs** and disruption. A **positive safety culture** helps **attract and retain** both customers and talent and maintains a good **brand image**. On an individual level, it's essential for **job satisfaction** and wellbeing. More importantly, it ensures that a company's most vital asset, its people, **gets home safe and well**.

Occupational health and safety has **evolved** so much over the years and it hasn't stopped yet, workers continue to face risks on a daily basis and the global pandemic has brought **more safety issues to attention** than ever before.

With the continual evolution of workplaces and **technology**, occupational health and safety must also **continue to advance**. For this reason, we spoke to **15 professionals** to see where they believe the future of occupational health and safety is going.





“ There is an urgent need for worker-centred risk management, taking into account factors such as age, gender and diversity. We cannot talk about protecting health and safety while there is precariousness, inequality, irregular hiring and no safety culture.

 **Susana Romero Miguel**  
Secretary General





 **Susana Romero Miguel**

Secretary General



## There is an urgent need for worker-centred risk management

The main objective of occupational health and safety is to **protect all workers** from exposure to situations or work activities that may cause damage to their health.

Today, we see that we are far from achieving this, in the midst of a major global crisis, with the worst accident and absenteeism rates in recent years and a **“hidden pandemic”** arising from the impact of this strain on our **mental health**.

Work and workplaces are undergoing **continuous change** due to the introduction of new technologies, with changes in the labour market, new forms of employment and organisation.

Against this backdrop, I believe that there is an urgent need for **worker-centred risk management**, taking into account factors such as **age, gender** and **diversity**. We cannot talk about protecting health and safety while there is precariousness, inequality, irregular hiring, while there is no **safety culture** and the average employer considers health and safety as just another “tax”. We need **political and institutional commitment** to work together for social change.



“ I believe that much of the face-to-face training can be partially replaced or substituted by technologies such as virtual, augmented or mixed reality, following a basic principle of safety: replace the dangerous with something less dangerous, if possible.

 **Sergio Bravo**

VR Trainer and H&S Professional





 **Sergio Bravo**

VR Trainer and  
H&S Professional



## Learning in a vivid, experiential and immersive way without the fatal consequences

I can only speculate from my own area of expertise. I have been a **height safety and confined space training specialist** (among other areas) at a theoretical and practical level for 15 years. I currently teach trainers how to use the **Ludus virtual reality platform** to provide courses with simulations that recreate various situations. I started with a chalkboard, moved on to a slide projector and then learned to use a computer, PowerPoint, videos, projectors, screens and electronic smartboards.

I believe that a lot of **face-to-face training** can be **partially replaced** or **substituted** by technologies such as **virtual**, augmented or mixed reality, following a basic principle of safety: replace the dangerous with something less dangerous, if possible. Why expose a worker to a risk if they can **experience it beforehand without putting themselves in danger?**

Moreover, if it's just refresher training, we only need to make sure that a person understands the consequences of poor decision-making, not complying with safety measures or not using the right PPE, in good condition. There is no better learning tool than to **experience** and "have accidents" if you don't comply with the above.

Likewise, I imagine the use of machines, suits and virtual reality goggles to experiment with the five senses in a realistic way, can you imagine smelling hydrogen sulphide in a confined space or the feeling of getting your hand stuck in a moving part of a machine? All without fatal consequences, just to **learn in a more vivid, experiential and immersive way.**

This is how I envision quality training in the future: **useful, realistic and tailored to the needs** of each individual worker.



“ Risk Management changed shape and focus, moving forwards, all health and safety professionals have an opportunity for growth, development, contributing, upskilling, and influencing future businesses.

 **Hugh Maxwell**

Managing Director of Maxwell Safety Limited





 **Hugh Maxwell**

Managing Director of  
Maxwell Safety Limited



## Risk Management has changed shape and focus

We experienced the impact and ongoing effects of the COVID-19 pandemic differently. Prior to COVID-19, many environments were changing their approach on health and safety management, with varying levels of acceptance and engagement of artificial intelligence, innovative technologies, and diversification. Risk Management **changed shape and focus**, moving forwards, all health and safety professionals have an **opportunity for growth**, development, contributing, upskilling, and **influencing future businesses**.

This is an exciting time to reposition, develop new skills, see greater acceptance and engagement in **reshaping risk management, health and safety**. Many can choose roles meeting our personal needs and desires with **employee wellbeing and welfare a higher priority** now and moving forwards. The great resignation is happening! Health and safety professionals are high demand! As an excited re-energised international professional, let me say opportunities are there, take them, upskill yourself, refocus, reshape, and get out of that comfort zone!



“ We will be able to replicate real environments, achieving more “immersive” experiences by putting the user at the centre, experiencing the consequences of suffering an accident first-hand.

 **Patricia Cabrera Martínez**

EHS Manager & Sustainability Leader South Europe  
at Griffith Foods



 **Patricia Cabrera Martínez**

EHS Manager & Sustainability  
Leader South Europe  
at Griffith Foods

## Incorporating virtual reality into training will present a necessary challenge

The future of occupational H&S is going to bring with it a **total paradigm shift** in terms of occupational hazards. A new era began in 2020 with the arrival of confinement by COVID-19, making us wave “surfers”, mask experts and bringing the “**home-office**” and its ergonomics to stay.

The **Metaverse** is not a home-office, but it will change how and what we work for, it will create virtual universes where we can look at each other’s faces and even sit together, opening doors to professions where psychosocial risks will become more important.

Another great challenge will be the incorporation of **virtual reality** into the field of training, a revolutionary technology of the present, which will be a must for the prevention of occupational hazards. We will be able to ensure that the risks of a role are incorporated, replicating real environments, achieving more “**immersive**” **experiences** by putting the user at the centre, experiencing the consequences of suffering an accident first-hand and involving the **emotional part of awareness** in the learning process.



“ The current reality is client bases of 400 companies per health and safety expert, who need to make lightning speed visits with a stopwatch in hand.

 **Pablo Medina Sánchez**  
Occupational Health and Safety Professional





 **Pablo Medina Sánchez**

Occupational Health and Safety  
Professional



## Occupational health and safety is doomed to remain on paper and die

Occupational health and safety is **doomed to remain on paper** and die. After **16 years in the profession**, I have witnessed its decline. In large companies with in-house health and safety advisors, H&S still retains its standards, but for a vast majority of health and safety consultancies that have gone through mergers and acquisitions, the current reality is client bases of 400 companies per health and safety expert, who need to make **lightning speed visits** with a stopwatch in hand. In many cases they provide their clients with **generic express training** every 2, 3 or more years, which are mostly online.

**Risk assessments are pre-made** and almost completely automatic, grouped by sector and activity, to get them out like hot cakes at the click of a button with stacks of 500 filler pages without substance and no specific studies of equipment, ergonomics or hygiene.

Health and safety experts are left burnt out and employers delighted to pay €150 a year for nothing, thinking that it's **just another tax**. Anti-health and safety, just an invoice. We are going where our public authorities wants us to go, and regrettably I see no solution. Fortunately, some of us are still **fighting against it**.



“ Smart sensors, in combination with our analytical platform, will enable the collection of precise data on the repetitive motions involved in working tasks. Data gathered through this dashboard will help us make decisions and track progress.

 **Denis Leblond**  
EMEA Channel Marketing Director





 **Denis Leblond**

EMEA Channel Marketing Director



## Using smart technology to support safety and ergonomics

At Ansell, we believe human well-being at work will continue evolving. For companies investing in **sustainability**, employees are their main asset in delivering **productivity** and know-how. Consequently, to improve health and safety at work, we will continue to innovate in products and services as **ergonomics** becomes a major priority.

In the near future, new technologies will complete our ergonomic solutions. For example, **smart sensors**, in combination with our **analytical platform**, will enable the collection of precise data on the **repetitive motions** involved in working tasks. Data gathered through this dashboard will help us **make decisions** and **track progress**.

This Ansell Inteliforz™ technology will alert of **risks to workers** and help define any need for appropriate training. This will contribute significantly towards **reducing muscular skeleton disorders**, which are the main cause of occupational illness, and the impact of direct and indirect costs for the companies, and for society as a whole.



“As time passes, archaic practices of putting pen to paper will soon be replaced by digitised safety management systems (SMS). Along with this will come optimising systems, maximising efficiency and the use of technology while minimising administrative manpower.

 **Amandeep Beesla**  
Director of Safety Insight & Innovation

S A L U S

## Progression through technological advancements and creating healthy workplaces that focus on mental health



 **Amandeep Beesla**

Director of Safety Insight & Innovation

S A L U S

The future of health and safety involves evolution across all industries, progression through **technological advancements**, and **computerised statistical analytics** to minimise workplace incidents.

As time passes, archaic practices of putting pen to paper will soon be replaced by **digitised safety management systems** (SMS). Along with this will come **optimising** systems, maximising efficiency and the use of technology while minimising administrative manpower.

In other words, labour will not be drained on daunting admin tasks but rather reallocated to human factors such as **coaching, mentoring, and training**. This, in turn, will help strengthen the overall SMS while exposing potential gaps or deficiencies that need to be mitigated or rectified. By streamlining safety systems and processes, management of human capital and assets will be **more efficient than ever before**.

In light of such pandemics as the Coronavirus (COVID-19), another concept of the future of safety is the invisible psychological aspect. I'm talking about **mental health and wellness**. Harms such as depression, anxiety, trauma or PTSD all directly stemming from the workplace. Risks such as working in a toxic environment, bullying, harassment, discrimination, abuse, assault, or violence all lead to psychological distress or mental unrest. To counter this, we must put professional support, resources, time, effort, commitment, and allocate funding to a **healthy and safe work culture** while fostering and maintaining a **positive workspace**. **Sustainability** is key to buy in from all levels.



“ Our future is the integration of changes in work habits and behaviours that generate safe and healthy workplaces.

 **Ismael Sánchez-Herrera PhD**  
President of AEPSAL





 **Ismael Sánchez-Herrera PhD**

President of AEPSAL



## Psychosocial and ergonomic factors, leadership and work habits

According to the International Labour Organization (ILO), around **2,300,000 workers die in workplace accidents** every year and according to Johns Hopkins University, 2021 ended with **6,123,493 deaths due to COVID-19** since the beginning of the pandemic.

Some studies state that more than **50% of cancers may be of occupational origin**. According to Eurostat (2021), "44.6% of European workers surveyed suffer from **mental health risk factors**", in Spain "60% say they have **experienced stress**". According to the European Agency for Safety and Health at Work (EU OSHA), the lack of occupational health and safety generates **€476,000,000,000** in costs a year.

Our future is the integration of **changes in work habits and behaviours** that generate safe and healthy workplaces where psychosocial factors are controlled and ergonomic principles are studied and accommodated, where leadership looks at health and safety for profitability, the commitment of workers and the social benefit it brings.



“ Increasingly, we will move away from selecting equipment based on the conditions of the environment, to giving greater weight to the needs and characteristics of each individual using tools that help experts select individual equipment in a personalised way.

 **Jaime Díaz-Terán Goñi**  
Commercial Industry Channel Director 3M Iberia

The 3M logo, consisting of the letters '3' and 'M' in a bold, red, sans-serif font.



 **Jaime Díaz-Terán Goñi**

Commercial Industry Channel  
Director 3M Iberia



## The focus of health and safety will shift from working conditions to individual needs

In recent years there has been great progress in the **development of procedures** and **equipment** that help workers return home healthy.

Raising awareness at all levels, from employers to PPE users, thanks in large part to the enormous work of health and safety experts regarding the need for **investment in education, quality products, services** and their **correct use**, has been the key to achieving many of the goals that we see today if we look back to not so long ago.

This process will continue, with a **focus on individual user needs**. Increasingly, we will move from selecting equipment based on the conditions of the environment, to giving greater weight to the needs and characteristics of each individual, with tools that help experts select individual equipment **in a personalised way** and to keep a record of its effectiveness.

This is a challenge that protective equipment manufacturers are already facing, developing services that make work easier for H&S experts by providing **reliable and comfortable equipment** that allows them to adjust to the needs of each worker in the **most difficult environments**.

At 3M, we work together with occupational H&S experts, distributors and end users so that by being more aware of risks, **the future will be safer and more comfortable**.



“ OH&S and the facilities management teams find themselves under a high level of scrutiny. The pandemic has changed the way people think about H&S, never have customers, employees, vendors and guests looked so closely at what is being done to keep people safe.

 **Rebecca Wormleighton**

Chief Operating Officer

ZENDELITY



 **Rebecca Wormleighton**

Chief Operating Officer

ZENDELITY

## Occupational health and safety is about to be digitally transformed!

OH&S and the facilities management teams find themselves under a **high level of scrutiny**. The pandemic has **changed the way people think about H&S**, never have customers, employees, vendors and guests looked so closely at what is being done to keep people safe.

The **challenge is, measuring, managing and reporting on compliance**. Most teams still **rely on paper and pen** to manage daily responsibilities across the various teams required to provide a safe environment. These disparate teams, and manual procedures makes it **time consuming** to manage compliance and almost **impossible to prove**.

By digitally transforming physical operations and OH&S, teams can reduce risk, while **eliminating all the manual paperwork and reporting**. Easily **access the operating data necessary** to have data driven discussions with stakeholders. **Simplify the communication** of changing responsibilities and training of employees. And **minimize the need for physical inspections** to ensure quality.



“ Occupational H&S must evolve to guarantee excellence, regardless of the activity or size of an organization or company. The future of H&S must go hand in hand with RDI.

 **Manuel Cortizas Turégano**  
Health and Safety Consultant





 **Manuel Cortizas Turégano**

Health and Safety Consultant



## Occupational health and safety must guarantee excellence to ensure a positive safety culture

Occupational H&S **must evolve to guarantee excellence**, regardless of the activity or size of the organisation or company. At Asepeyo we understand that the **future of H&S must go hand in hand with RDI**.

For example, companies must:

- Be **faster and more effective in controlling risks** through specialised risk management techniques (in hygiene, ergonomics, health, safety) and transversal techniques at the same time.
- Apply more **efficient and adaptable evaluation methodologies** to any uncertainties that arise.
- Use **Dynamic Data Analysis** to share the effectiveness of the measures implemented and detect possible emerging risks.
- Simulate risk management in the **design phase of facilities and equipment installations**.

In short, health and safety professionals must provide the best service to organisations and companies in order to guarantee their resilience, to become safe and healthy, to achieve a positive safety culture, to be psychologically safe, or however excellence is defined.



“ The future of health and safety lies in a 360° risk assessment where PPE, solutions and training are adapted to each work scenario in order to shape procedures with full guarantees of safety and effectiveness.

 **Alberto Lozano**  
Technical Director





 **Alberto Lozano**

Technical Director



## Product, information and training must go hand in hand

As a manufacturer of PPE for more than 50 years, we cannot think of a **product** without **information** and **training**. We believe that these three values, which we refer to by the acronym PIT must go hand in hand.

In our opinion, the future of health and safety lies in a **360° risk assessment** where PPE, solutions and training are **adapted to each work scenario** in order to shape procedures with full guarantees of safety and effectiveness. Since Petzl was founded, our challenge has always been to create innovative tools and services that allow men and women to progress, position and protect themselves safely in vertical environments, such as with our professional head torches that facilitate working in the dark.



“ Innovation, new ways of working, new technologies and even the ageing population are leading us to an unprecedented landscape and we must adapt to these changes quickly.

 **Carmen Gallo Castro**

Doctor of Occupational Medicine

Occupational Health and Safety Centre Sevilla



Junta de Andalucía



**in Carmen Gallo Castro**

Doctor of Occupational Medicine

Occupational Health and  
Safety Centre Sevilla



## We live in an unprecedented landscape and we must adapt quickly to the changes

In my opinion, the future of the occupational health and safety lies with a **reform of health and safety legislation**. There is no doubt that our social and working environment today is **nothing like what it used to be**. Innovation, new ways of working, new technologies and even the ageing population are leading us to an **unprecedented landscape** and we must **adapt to these changes quickly**.

On the other hand, I think that occupational health and safety should have never moved away from what we call Collaborative Mutual Societies with the Social Security system. Perhaps everything would have been easier to articulate because of its powerful roots.

**Risk management was carried out in a very different way** to what we see today, before health monitoring was more **personalised**. Nowadays, the focus is on medical check-ups, before we also looked at preventing occupational diseases and the safety of our workers.

**We knew the companies**, we were part of them and their workers identified us as their doctors; **today that has changed**.



“ The future of occupational health and safety lies in adapting to the changes brought about by new occupations. This entails specific risk management plans adapted to new working environments and new risks, which must include training of workers.

 **Luis Martínez**  
Business Development Manager Iberia

**bollé**  
SAFETY



 **Luis Martínez**

Business Development  
Manager Iberia

**bolle**  
SAFETY

## New sectors of activity require new forms of risk management

After years of evolution, safety culture has become increasingly important, both for companies and workers.

Awareness of occupational health and safety issues has led to a **reduction in the accident rate**.

The continuous **advance of science and new technologies** generates **new sectors of activity**, which require **new forms of risk management**.

The future of occupational health and safety lies in adapting to the changes brought about by new occupations. This entails **specific risk management** plans **adapted to new working environments and new risks**, which must include **training** of workers.

With these measures and good practices, it will be possible to improve the relationship between companies and their workers, with the **clear objective of taking care of the safety and wellbeing of people**.



“ Systems have become increasingly complicated, which means that we no longer understand what will happen, how it will happen or why it will happen. We must change ourselves to impact the future of occupational health and safety.

 **Sergio Gallardo**

HOP Trainer and Consultant & ERGOHOP Podcast Creator





 **Sergio Gallardo**

HOP Trainer and Consultant &  
ERGOHOP Podcast Creator



## Changing the risk management philosophy of a company can be challenging, but it's worth it

In my opinion, we have saturated our current processes with all the traditional approaches. Systems have become increasingly complicated, which means that we no longer understand what will happen, how it will happen or why it will happen.

We **must change ourselves** to impact the future of occupational health and safety. But change is often difficult, because we have mental frameworks that can become so ingrained that we cannot recognise how we are sometimes wrong. This requires **additional attention** from H&S stakeholders.

As a starting point, I recommend adopting the principles of **Human and Organisational Performance (HOP)** that originated with safety thought leaders such as Todd Conklin.

HOP is an approach based on **resilience, capability and tolerance** in a system.

Changing the risk management philosophy in an organisation can be **challenging** and sometimes difficult, but believe me, **it's worth it**, the future is already happening.

## CONCLUSION

---

The global pandemic has acted as a **catalyst for change** in regards to occupational health and safety, with more people **focusing on health and wellbeing than ever before**. COVID-19 also brought about **new ways of working** and along with it, many negative **psychological effects** on mental health.

H&S is moving away from its traditional focus on working conditions and moving towards the **needs of each worker**, with more emphasis on **diversity, age, and gender**.

A **major challenge** in the industry is **changing attitudes** towards H&S, and helping companies view the work of **H&S professionals** as **more than just another invoice** that they need to pay.

Occupational H&S will continue to leave pen and paper behind in exchange for **advanced technology** like **big data** and **modern systems**. **Smart sensors** will continue to grow in popularity and provide more detailed risk analysis and understanding to help improve factors like **ergonomics** and **comfort** of safety equipment and **PPE**.

Innovative technology like **virtual reality** will seek to substitute conventional training practices with **immersive experiences** that allow workers to suffer accidents without the dangerous consequences and will focus on changing attitudes towards the **perception of risks**. Technology like the **metaverse** will also be applied to meetings and will be used to **connect more people than ever before**.

## ACKNOWLEDGEMENT

---

We would like to thank the **15 experts** who shared their opinion and insight on what they **envision** for the future of occupational health and safety.

We believe that by collating these **ideas** we can promote innovation and work together to **deliver a safer future**.

### Thank you to:

Susana Romero Miguel, Sergio Bravo, Hugh Maxwell, Patricia Cabrera Martínez, Pablo Medina Sánchez, Denis Leblond, Amandeep Beesla, Ismael Sánchez-Herrera, Jaime Díaz-Terán Goñi, Rebecca Wormleighton, Manuel Cortizas Turégano, Alberto Lozano, Carmen Gallo Castro, Luis Martínez and Sergio Gallardo.



DELIVERING A SAFER FUTURE

