

CONTINUING EDUCATION SESSIONS

Location: Perth Convention and Exhibition Centre **Date:** Saturday 30th of November and Sunday 1st of December

Pricing (Inc GST)

Full day: \$630 Member \$780 Non-Member

Morning tea, lunch and afternoon tea provided.

The AIOH has developed a **Career Development Pathway (CDP)** program to assist members and aspiring occupational hygienists progress through their career.

For more information on the AIOH Career Pathway for Occupational Hygienists, please click <u>here</u>.

CDP Level

- 1. Allied Professional
- 2. Early Career
- 3. Practitioner
- 4. Professional
- 5. Senior Professional

Certification Maintenance Points

If you are a COH you will receive CM Points for a half or full day CES. CM Points and certificates will be sent out digitally post conference.

Half Day: 0.5 CM points Full day: 1 CM point

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Half day: \$330 Member \$390 Non-Member

Morning tea or afternoon tea and lunch provided.



To register for the full conference and your continuing education sessions scan the QR code

For registration or conference enquiries, please reach out to AIOH <u>Events</u>

Keep an eye out on our website, LinkedIn, Instagram and Facebook as more information gets released!





FULL DAY SESSIONS

Saturday 30th of November

Time: 8:45 am - 5:00 pm

CES 1: Practical Heat Stress Assessment: Time to Polish Up the Old Tools and Introduce Some New Ones

Speaker: Dr Ross DiCorleto, Principal Consultant, Monitor Consulting Services **CDP Level:** 1-4

This full day CES will begin with a brief refresher and 'back to basics' approach on heat stress, concluding with an emphasis on using a range of tools (both old and new) across the three-step protocol. Participants will use various practical tools such as checklists, the new predicted heat strain tables and mobile applications to analyse heat stress scenarios to identify the level of risk and appropriate controls to use, not just as 'stop work indicators'. Scenarios will be presented to demonstrate when some controls work well and others where they fail or make the situation worse.

On completion the participant will be able to:

- Recognise a potentially hazardous heat stress situation
- Conduct and/or facilitate a first level thermal risk assessment
- Utilise a rational index to analyse the environmental and physical parameters of a scenario
- Understand the key components of a physiological assessment
- Determine the most appropriate controls to use in different heat stress scenarios.

CES 2: Exposure Assessment Framework for Aerosols and Their Elemental Composition

Speaker: Steven Verpaele, Industrial Hygienist, Nickel Institute **CDP Level:** 2-4

This CES aims to provide a framework for exposure assessment related to aerosols and their elemental compositions. It covers the general exposure assessment framework depending on the toxicological endpoints. Within the framework the following aspects are considered:

- The importance of standardisation, specifically the impact of international standards on the exposure risk assessment framework
- Information and application of several tools, like prioritisation, hazard banding and modelling tools will be provided
- The history of particulate sampling and the impact on the exposure risk assessment and choices to make when measurements are needed to evaluate workers exposure
- Sampling train requirements for measuring particulate matter, and requirements regarding sampling and analysis of elemental composition
- The role of real time particulate matter measuring devices on future assessment strategies.



CES 3: Drinking Water Quality Results Interpretation

Speaker: Steven Delides, Partnership Director, Principal Water Quality Consultant, Ecosafe International **CDP Level:** 1 - 3 **Time:** 8:45 am - 12:15 pm

This CES will focus on the interpretation of drinking water lab results and their implications for public health. Attendees will learn to analyse and understand various water quality parameters, enabling them to make informed decisions and ensure safe drinking water standards.

Key learning outcomes:

- Australian Drinking Water Guidelines (ADWG) awareness
- Key water quality parameters
- Primary contaminants of concern, including those not covered by ADWG (such as Opportunistic Premise Plumbing Pathogens Legionella, Naegleria Amoeba, Pseudomonas Aeruginosa etc.)
- Critical and process control points
- Typical regulatory reporting requirements
- Regulations and guidelines
- Laboratory processes overview
- Quality assurance and quality control processes
- Risk assessment of guidelines exceedances
- Troubleshooting and further investigation guidance
- Incident Response Procedures (IRP) / Trigger Action Response Plans (TARP)
- Water quality data management.

CES 4: Fundamentals of Respiratory Protection Device Selection (Basic Course)

Speaker: Mark Reggers, Certified Occupational Hygienist, Specialist Application Engineer, 3M **CDP Level:** 1-3

Time: 8:45 am - 12:15 pm

Respiratory Protection Devices (RPD) can be used for reducing exposure to airborne contaminants on the job when higher order controls are not adequate or feasible. The use of respirators in the workplace requires the employer to have a site-specific respiratory protection program (RPP). A key component of an RPP is the selection of appropriate respiratory protection devices. Selection of RPD is much more than selecting the correct filter level. This CES will cover a wide range of considerations and factors for selecting RPDs through interactive discussions and examples. Additional topics include respirator classification and the importance of respirator fit.



CES 5: Chemical Exposure Modelling for Occupational Hygienists

Speaker: Dr Joost van Rooij, Senior consultant, Owner at Caesar Consult, Co-Founder of Chemrade Software BV, The Netherlands **CDP Level:** 4-5 **Time:** 8:45 am - 12:15 pm

The use of these quantitative chemical exposure models is not yet common among Australian occupational hygienists. This CES provides a concise and practical overview of chemical exposure modelling for the occupational hygienist and covers/provides the following:

- Role of exposure modelling in chemical risk assessment
- Insight in ECETOC-TRA Worker Exposure Tool: algorithm, exposure modifiers (input), and exposure estimates (output)
- Stoffenmanager: algorithm, exposure modifiers (input), and exposure estimates (output)
- Insight in the Advanced Reach Tool (ART): algorithm, exposure modifiers (input), and exposure estimates (output)
- Application domain of these exposure assessment tools
- Reliability and validity of these exposure assessment tools

Examples will be shown during the session and possible issues and practical experiences will be shared.

CES 6: Everyone's a Winner, Baby - Creating Behaviour Change

Speaker: Sara Jackson, COH MAIOH, Occupational Hygienist **CDP Level**: 1-3 **Time:** 1:00 pm - 5:00 pm

As Occupational Hygienists we are routinely trying to influence the behaviours of others, requesting workers to wear sampling pumps and PPE, asking them to follow safe work instructions and competing for budget to implement engineering controls.

But what if you could do this consciously, intentionally and with a full understanding of the variety of ways behaviour can be influenced? If you acted for the good of everyone involved, then your attempts to change behaviour could be effective and promote a culture where people enjoy doing the 'right' thing. Yes, you read that correctly. This is an invitation for you to join me for a deep dive into the science behind different methods of behaviour change. The pros and cons of each and the nuances required for success. Get the lowdown on how all the methods work, so you are empowered to choose the right fit for your organisation or situation and apply it effectively.

During this CES, you will hear relatable stories of how these different methods can play out in our professional and personal lives and influence our relationships. You will learn about and see inspiring examples of behaviour change done well, and other stories highlighting the pitfalls of trying to change behaviour without understanding these concepts. Whilst there is plenty of opportunity to geek out on the science of behaviour change during this CES, it is setup to be a fun and interactive with the opportunity to brainstorm current behaviour issues at your workplace. Learn how to change behaviour, create buy in and generate win-win situations. With your colleagues, children, spouse and pets. Yep, these concepts work with everyone!



CES 7: The Importance of Purpose – The Art of Asking the Right Questions and Delivering Useful Reports

Speakers: Jackii Shepherd and Marcus Brooks, Senior Occupational Hygienists, Robson Environmental **CDP Level:** 1-3

Time: 1:00 pm - 5:00 pm

Starting out with a clear purpose means you can tell a scientific story and outline the how, when, what and who, build a relationship with your client; and be able to write a concise and meaningful report and recommendations.

This CES will:

- Demonstrate how the purpose links to every part of an assessment plan or quote, monitoring or testing programs, and a report and recommendations
- Apply the principles of occupational hygiene to define the purpose of an assessment, and every step that follows
- Prepare you for conversations with clients and the skill of scientific storytelling
- Provide real-word examples to practice your skills.

This CES is suitable for beginners, intermediate and experienced occupational hygienists and will include interactive examples on:

- Mould
- Dusts (welding fumes, RCS, dusts, etc.)
- Noise
- Static and personal monitoring.

CES 8: How Understanding GHS (Rev.7) can Enhance Your Hygiene Assessments (and Help You Read an SDS)

Speakers: Julie Sullivan, CIH MAIOH, Principal Occupational Hygienist and Peter Aspinall, COH MAIOH, Technical Executive, WSP Australia **CDP Level:** 1-3 **Time:** 1:00 pm - 5:00 pm

The purpose of the Globally Harmonised System (GHS) of classification and labelling of chemicals system is to provide knowledge to the workers about the health, safety and environmental hazards of the chemicals they regularly use (or are working in the vicinity of). This hazard awareness information must be interpreted from the labels and SDS's, but if you are not comfortable with knowing what information is relevant, or what a pictogram means, the system can quickly break down.

This half day introductory CES will take the participants through a brief history of the GHS (Rev.7) program, the stories behind the pictograms and hazard / precautionary statements, how they can be utilised in the workplace, and provide information on the limitations of the system.

Several example SDS will be reviewed in small breakout groups in order to practice locating the information that is required for workers using the chemical (i.e. What do I do in an emergency...?) and for the Hygienist (What controls or PPE do I need to recommend...? or is this chemical something that requires personal monitoring...?).



CES 9: From Research to Relatability: Science Communication Best Practices from Leading Podcasters

Speakers: Dr Erin Welsh and Dr Erin Allman Updyke, This Podcast Will Kill You **CDP Level:** 4-5 **Time:** 1:00 pm - 5:00 pm

This CES will present an overview of science communication best practices, with special emphasis on what approaches to avoid, and which strategies work best. Using a combination of presentations, small groups, and peer-to-peer communication, 'The Erins' will discuss the elements of effective science communication, practice reframing and presenting popular science topics and specialty research and provide opportunities for feedback and interactive learning.

Attendees will be able to:

- Understand the need to identify a target audience, set specific educational goals with science communication, and build trust with the public
- Recognise the importance of and develop tools to engage with their audience
- Identify factors contributing to the trust and knowledge gap between scientists and the general public
- Develop skills to evaluate and critique popular science presented by the media
- Practice explaining their work or research to other attendees and identifying ways to better balance depth with clarity.



FULL DAY SESSIONS

Sunday 1st of December

Time: 8:45 am - 5:00 pm

CES 10: Planning and Deployment of Real Time Particulate Monitoring (RTPM) Programs

Speaker: Dustin Bennett, Principal Hygienist, GCG Health Safety and Hygiene **CDP Level**: 3-5

Given the interest in RTPM programs across industry, the focus of this CES will center on how practitioners can execute a successful RTPM program. This CES will cover:

- Introduction to RTPM
- Objective setting (right sensor, used right)
- Principle of operation (how the sensors work)
- Device selection
- Deployment planning process
- Basic data analysis & reporting principles.

CES 11: Introduction to Cab Theory – Prevention and Control of Airborne Contaminants in Operator Cabins [AS/ISO 23875]

Speaker: Jeff Moredock, ISEEE President and International Project Lead for AS/ISO 23875:2023 **CDP Level:** 3-5

This comprehensive CES delves into the integration of environmentally controlled operator enclosures within an Occupational Health and Safety Management System. Utilising international standards, real-world industry case studies, and cutting-edge research from NIOSH and ISEEE, this CES will cover:

- Engineering controls
- Testing requirements and procedures
- Performance metrics
- Administrative controls.

This CES also includes an in-depth study of AS/ISO 23875, the international cab air quality standard, focusing on compliance with a 25 μ g/m³ silica threshold.



CES 12: The Art (& Science) of Storytelling

Speaker: Trish Kerin, Lead Like Kerin **CDP Level**: 1-5 **Time:** 8:45 am - 12:15 pm

Trish, an award-winning international expert in process safety leadership, leverages her extensive engineering and leadership experience to help organisations worldwide improve safety outcomes through storytelling. Her ability to convey complex messages in an understandable and actionable way makes her an ideal host for this half day CES on "The Art (& Science) of Storytelling." Drawing from her roles on various prestigious committees and her recognition as a "Superstar of STEM," Trish will lead an engaging half-day CES on the art and science of storytelling, exploring why it is effective and how to harness its power to convey complex information.

Learning Outcomes:

- Understand the fundamental elements of storytelling
- Understand the different preferences people have to learning
- Apply the elements to plan a story-based presentation
- Experience preparing a short storytelling presentation.

CES 13: Health Monitoring for Occupational Hygienists

Speaker: Dr Julia Norris, MD, FRACGP, COH, FAIOH **CDP Level:** 3-5 **Time:** 8:45 am - 12:15 pm

This CES aims to give hygienists an understanding of the objectives and outcomes of a health monitoring program as well as their role in establishing and managing a health monitoring program and its integration into their overall health management system.

Learning Outcomes:

- What is health monitoring?
- Legislative requirements for health monitoring
- Goals and objectives of a health monitoring program
- Developing a best practice health monitoring program
- Engaging a registered medical practitioner (RMP)
- What is the hygienist's role?
- What is the RMP's role?
- Ensuring meaningful health monitoring outcomes
- Managing health monitoring results
- Integrating health monitoring results into your health management system to guide better health outcomes
- Specific health monitoring requirements for common contaminants
- Schedule 14 chemicals
- Other chemicals for consideration
- Considerations for special populations (e.g. pregnant or breastfeeding women)
- Case studies and worked examples.



CES 14: Understanding PFAS and Human Health Risk

Speaker: Therese Manning, Principal, Environmental Risk Sciences **CDP Level:** 3-5 **Time:** 8:45 am - 12:15 pm

This CES will delve into the complexities of Per- and Polyfluoroalkyl Substances (PFAS) and their potential impacts on human health. Participants will gain valuable insights into the latest research, risk assessment methodologies, and strategies for mitigating exposure to these persistent environmental contaminants.

Learning Outcomes:

- Understanding health impacts of PFAS
- Assessment techniques
- Mitigation strategies
- Regulatory standards / best practice
- Story telling / risk communication tips.

CES 15: Start with the End in Mind: How to Give Compelling Presentations!

Speaker: Linda Apthorpe, Senior Occupational Hygienist, Hibbs **CDP Level:** 1-3 **Time:** 8:45 am - 12:15 pm

As Occupational Hygienists we know that communication is an integral component of the work we do. In many circumstances, we only have limited opportunities to get our message across to implement change or to make important information stick. In these cases, your message delivery counts, and effective communication is essential. You may need to deliver your message by standing in front of worker groups, OHS committees, management representatives or even delegates at an occupational hygiene conference! This CES will help you to communicate your story and build your confidence in presenting. We'll explore how to plan, design and prepare your presentation, and to engage your audience to get your message across.

There will be information on presenter techniques, and plenty of tips and tricks including how to make an impact, how to improve your presentation and communication skills, how to build confidence and how to feel comfortable in presenting. This CES is for anyone who wants to improve their presentation preparation and presenting skills to give compelling presentations.



CES 16: Publishing Your Scientific Research: The Process, Ethics and Strategies for Success

Speaker: Professor Rachael Jones, UCLA Fielding School of Public Health Department of Environmental Health Sciences

CDP Level: 4-5 **Time:** 1:00 pm - 5:00 pm

The focus of this half day CES is to provide a framework for practitioners on the process of publishing scientific research, from inception to publication, with firsthand accounts from the Chief Editor of the Annals of Work Exposures and Health.

Learning Outcomes:

- Describe the common types of articles in the peer-reviewed literature
- Explain the roles of authors, editors and reviewers in publishing
- Describe the structure of research articles and key functions of each section
- Explain how to match your research with an appropriate journal
- Explain the key metrics of journal performance
- Identify common challenges encountered by new authors in the writing and publishing process
- Discuss ethical issues in scientific publishing.

CES 17: Australasian Radiation Protection Accreditation Board - Certified Radiation Safety Advisor Exam and Submission Primer

Speaker: Dean Crouch, Senior Health Physicist, CRSE, MARPS, MAIOH **CDP Level:** 1-3 **Time:** 1:00 pm - 5:00 pm

This comprehensive half day CES is designed to equip attendees with a thorough understanding of the accreditation process, focusing on key elements such as the review criteria for radiation protection plans and sample exam questions. By the end of this session, participants will be familiar with the accreditation process and also gain insights into the broad knowledge and experience required for successful Certified Radiation Safety Advisor (CRSA) candidates.

- Accreditation process overview, key milestones and timelines
- Common challenges and how to overcome them
- Sample radiation protection plan document review criteria
- Examples of well-prepared plans and common pitfalls to avoid
- Overview of the exam format and types of questions
- Practice with sample questions
- Tips and strategies for effective exam preparation.

By the end of this session, attendees will:

- Have a clear understanding of the accreditation process and its requirements
- Be familiar with the criteria for reviewing radiation protection plans
- Gain confidence in tackling exam questions through practice and strategy tips
- Understand the broad knowledge and experience necessary for successful accreditation.



CES 18: Artificial Intelligence in a Modern Noise Management Program

Speaker: Samuel Turner, noiseAl Product Manager, Wood **CDP Level:** 1-5 **Time:** 1:00 pm - 5:00 pm

Traditional noise dosimetry analysis methods relying on statistical interpretation, anecdotal evidence, and human observation, often fail to identify the underlying issues/noise sources driving high noise exposure. Technological advancements in AI and machine learning can be leveraged to extract insights previously obscured from noise dosimetry programs, allowing for targeted noise management programs focused on implementing informed noise reduction measures. During this hands-on workshop, attendees will build their own machine learning model to determine noise sources driving high noise exposure and learn how AI can be utilised in a modern noise management program.

CES 19: Analysis of Asbestos and Crystalline Silica in Mining

Speaker: Dr Laurie Glossop, Principal Consultant, Certified Occupational Hygienist, Glossop Consultancy **CDP Level:** 4-5 **Time:** 1:00 pm - 5:00 pm

Australia has a large mining industry, especially in Western Australia and Queensland. Western Australia mines just about every mineral required by the world including the "Critical Minerals" that have been identified by governments. In Western Australia there are about 160,000 people directly involved in mining. This CES will cover measurement and analysis techniques for asbestos and respirable crystalline silica (RCS).

With regards to asbestos in mining, elutriation/sedimentation has been used in combination with TEM/EDX/EDS (Energy Dispersive X-ray Spectroscopy) to speciate with some uncertainty and to determine the asbestos concentration to <0.001%. This technique is highly sensitive and can detect concentrations at 0.001%. TEM/EDS and SEM/EDS are not absolute in speciating, but if you have asbestiform morphology and EDS elemental composition, there is reasonable certainty it is an asbestiform mineral. There is also another analysis method called Selected Area Electron Diffraction (SAED) that allows high certainty speciation. This CES will present detail on elutriation/sedimentation and its benefits.

With respect to respirable crystalline silica (RCS), there has been significant changes in regulations relating to RCS with the lowering of the WEL to 0.05mg/m3 and potentially to 0.025mg/m3 shortly. We will discuss measuring and analysing for RCS at these low concentrations.