



CANADIAN REGISTRATION BOARD OF OCCUPATIONAL HYGIENISTS

02-2021 NEWSLETTER

January 2021 President Message

Dear CRBOH Members,

It has been an exciting last 4 months for most industrial hygienist in the country, supporting our national fight against Covid-19 with patience and determination.

- Yes, ventilation is important.
- Yes, you should ensure it operates as design and improved, when feasible..
- No, a face mask is not sufficient when you cannot avoid the 3 C's (closed spaces, crowded places, and close-contact settings).

I could go on and on. One thing for sure, looking at the actual Covid-19 case spike, we must admit that social distancing, wearing home-made face covering, thorough washing of hands and workspace may not be sufficient in all situations.

Therefore, the CRBOH board of director (BOD) has supported, in collaboration with Masks for Canada, Workplace Health without Borders, Mission Panache and Covid-Stop, the publication of "There is still time to address aerosol transmission of COVID-19" letter to the media published on January 4th. Our hope is to continue the discussion with decision makers from industry and public health agencies regarding the need to improve the Canadian society pandemic current and future response plans.

[Time for government to take aerosol transmission of COVID-19 seriously | Ricochet](#)

The BOD is also proud to have managed to safely close the gap created by the cancellation of the spring examination by holding the exams in the fall, most of them online, with the support of dedicated volunteer proctors. We are pleased to announce that we have 14 ROH and 1 ROHT that have successfully completed the written part of their exams. The oral examiner has also completed multiple exams including our first international candidate, closing the gap on the backlog.

Meanwhile, we have remained focus on our top four priorities for the year.

Examination Committee

This has become my favourite saying during Board of Director Meeting, "The reason we exist is to administer exams so the society can benefit from the services of recognized, competent occupational hygienist to address health hazards. This is the business we must maintain during Covid".

This committee is about reviewing all our current process to facilitate the growth of our profession. With the Covid challenge, our Chief examiners and the registrar have looked at new ways to facilitate the access to the examination and reduce the delays in getting results to candidates. All options are being reviewed and we are hoping for the implementation of new practices in the near future.



The Future of the Profession

Discussions are active and ongoing on this front and include regular discussion with outside stakeholders like the BCRSP and ASHSP. Thanks to the work of our directors, we have the first draft of a white book to facilitate future discussions with our members.

Maintenance Committee

We are happy to announce that we have merged the Maintenance point committee and the Points committee. We hope that this merger will facilitate and streamline the various processes required for our members to demonstrate their active professional development on a five-year cycle while simplifying the interface between our member and the review committee.

Communication & Promotions

Our communication and promotion committee is growing at the centre of our development strategy. The group keeps expanding in members and scope. Our hope is that we continue to be the reference group of occupational hygienists in Canada. Great work from the team for this new newsletter format.

All of these groups will have additional workshops in March and April this year and we just can't wait for our AGM in June to present the fruit of our work. Anybody that would like to volunteer to support these initiatives are welcome and should contact the organization secretariat to express their interest.

Until the next publication, keep strong, the value of our profession and the benefit of having a Canadian organization representing us has never been clearer.

Sincerely,

Marc-Andre Lavoie, ROH

CRBOH President



CRBOH Registrar Update

Liz Krivososov, ROH, CIH, PEng

I am trying to think of a snappy phrase with which to start the 2021 Registrar's message, but what can be said about this past year? That it was grim? Challenging? Extraordinary? Stressful? At times inspirational and at others heart breaking? 2020 was certainly all these things and more. As the world grounds to a halt at the end of March, so too did the March 2020 CRBOH written examinations. The Board decided in the interest of public health to postpone examinations until the fall.

In 2020, a record number of successful applications (36) for ROHT® and ROH® examinations were approved. However, in addition to dealing with application requirements, candidates also had to deal with pandemic requirements such as travel restrictions. The goal for the Board was to provide safe and secure examination options. CRBOH allowed candidates to defer their examination until 2021 without penalty due to the local pandemic conditions. Further challenges for the Exam Committees and the Board, were dealing with varying local public health requirements, changing examination locations, and courier delays.

Due to the hard work from all the volunteers, the Examination Committees and Board members, the written examination successfully took place on October 3, 2020 in locations from coast-to-coast. Onsite proctors ensured a fair process and that local public health instructions were followed. The successful ROH candidates will be sitting for their oral portion of the examination in early 2021. In addition, oral examinations for NAR candidates also took place in the late fall and winter of 2020.

We would like to congratulate the following successful candidates:

Rachelle MacEachen, ROHT .

Mey Abdawi-Sardinha, ROH

Abbie Alcon, ROH

Brent Chopping, ROH

Niclas Manson, ROH

Having successfully navigated the 2020 "Pandemic Exam", CRBOH is planning on delivering written examinations at the end of March 2021.



Rob Strang's book review of :

Hunting the 1918 Flu: One Scientist's Search for a Killer Virus, author Kirsty Duncan

The first wave of the 1918 influenza did not have a high mortality, appearing in March 1918 in US military camps in North America. Kirsty Duncan notes it was inaccurately labelled the Spanish flu, because it was not until it had spread to Spain before it was announced to the world. It was the second wave, in the fall of 1918 that was the most devastating, killing 10% of those who contracted it. The milder third wave exited each country 12 months after the initial onset, leaving a global death toll estimated to be 20 to 40 million people. Thirty to 50 thousand of those were Canadians.

Kirsty Duncan, a Canadian medical geographer, sought to unlock mysteries of the deadliest plague in recorded history by exhuming the remains of Norwegian coal miners whose bodies were buried in permafrost on Spitzbergen Island. The book takes us through the nine-year project, from identifying victims most likely to yield genetic material of the flu virus to extraction and analysis of tissue samples which potentially contained live virus.

Although the book is so relevant today, it was published in 2003 and the project was initiated in 1992. It was written for popular consumption, starting with a riveting series of anecdotes of tragic deaths from the flu. She goes on to outline the immense challenges with researching, planning, and coordinating an international medical project. Navigating the cultural and legal challenges of exhuming bodies on a remote arctic island turned out to be less challenging than dealing with conniving egos. Far from a dry account of academic research, we are introduced to the history and culture of Norway's Svalbard Archipelago and given a reality-show-worthy account of the nice and not-so-nice personalities of her academic team and their dramatics, as some fight to claim credit for the expedition.

We see that research science is a game of hardball and Kirsty Duncan came equipped with a 90 mph fastball in the form of 15, four-inch binders of faxes and notes to back up her tell-all account of the rivalries, publication wars, unethical practices and age and gender biases. There is something for all of us in this book, whether our interests are from the field, lab, academia, or administration. If you just want to know the history of the 1918 pandemic, other sources may be more suitable, but this book brings it close to home with the blow by blow of a real-life tale.

It is interesting to note that Kirsty Duncan went on to politics, becoming a federal MP in 2008, Minister of Science in 2015 and currently is Deputy House Leader of the Government.

Rob Strang is a Registered Occupational Hygienist, Professional Engineer and a Canadian Registered Safety Professional who worked in manufacturing for 9 years before providing industrial hygiene consulting services in the US and Canada for more than two decades. He was a member of the Environmental Appeal Board of Ontario and is a former Orangeville Town Councillor who has written far too many columns on politics in the local paper.



The OEL Adjust Tool: Preventing Occupational Disease by Understanding and Interpreting Exposures

Kimberly O'Connell, CIH, ROH, CRSP, Occupational Health Clinics for Ontario Workers & Co-Chair, Occupational Disease Action Plan (ODAP)

As Occupational Hygienists, one important aspect of our chosen profession is to help workers and workplaces to recognize, assess, and control their workplace hazards.

Risk communication through knowledge translation is a key pathway and part of the [Occupational Health Clinics for Ontario Workers](#) mandate. OHCOW is a multi-disciplinary team of health professionals (occupational health nurses, occupational hygienists, ergonomists, contract physicians and client service coordinators) committed to promoting the highest degree of physical, mental and social well-being for workers and their communities. We strive to prevent occupational disease by primary, secondary and tertiary methods (preventing harmful exposures, screening for early signs of occupational disease and recognizing cases of work-related disease).

Occupational Exposure Limits (OELs) (where they exist) provide one tool hygienists use to interpret the health risk from workplace exposures. By definition OELs are based on an 8 hr /40 hr workweek (traditional schedule). A complementary OEL tool is the adjustment of the OEL to assure adequate protection of workers working unusual schedules (extended shift work) leading to the [OEL Adjust Tool](#) presented here for your use and sharing.

OHCOW is also leading [Ontario's Occupational Disease Action Plan \(ODAP\)](#) together with the Ministry of Labour, Training and Skills Development (MLTSD). ODAP aims to align the Ontario provincial health and safety system and other healthcare partners (including occupational hygienists) towards a collaborative approach to occupational disease prevention. The development of this tool was originally driven by [the Occupational Health Modernization Amendments](#) (effective January 2020) and through ODAP's Respiratory Hazards Working Group. They identified the need to provide practical, accessible guidance to help workplace parties manage the use of the newly introduced "Quebec Model" for adjusting irregular work shifts. Prior to this regulatory change Ontario's approach for adjusting OELs reduced the TWA proportionately based on the increased exposure time. All substances, regardless of toxicity, were treated the same. The new approach, based on stakeholder interest, allows the use of the Québec Model (see the [2015 Guidebook published by Québec's Institut de recherche Robert-Sauvé en santé et en sécurité du travail \(IRSST\)](#) which considers toxicological information such as sensitization, irritation, organ toxicity, reproductive system toxicity and teratogenicity, in addition to exposure and recovery times. The model is referenced in the ACGIH TLV Book as an approach for addressing "irregular work schedules". The model is used in several other Canadian jurisdictions (e.g., BC, Alberta) and internationally.

Though the tool is currently limited to a compliance-tool for Ontario using the methodology described in the IRSST guide using the applicable TWA set out in the Ontario Table or the ACGIH® 2017 guidelines, the next step (April 2021) for the tool will be to focus on a broader health-based approach. OHCOW has unique clinical experience with workers who have suffered illness or injury due to exposures in the workplace and has seen the role the OEL's play in prevention (or its lack) when illnesses occur even when exposures comply with the OEL. OHCOW recognizes the limitations of these tools and has made submissions to the ACGIH TLV/BEI Committees, Health Canada's Chemical Management Plan and the MLTSD, proposing changes to the Occupational Exposure Limits (OEL's) and associated policies advocating for OEL adjustments based on a health effects perspective.

We hope the [OEL Adjust Tool](#) expands your toolkit and aids your everyday efforts as to help prevent occupational disease through helping others understand and interpret workplace exposures.

We gratefully acknowledge the collaborative effort of Daniel Drolet, Consultant OHS (who worked 33 years at the IRSST and has developed with many collaborators numerous applications for both laboratory and industrial hygiene uses for the benefit of the industrial hygiene community), the MLTSD, ODAP System Partners, and OHCOW's Occupational Hygienists.



The Practice of Leadership – Know Thyself

A group of seasoned occupational hygiene practitioners, if asked, would all agree that we could all do to further develop our leadership capacity. Professional development should not just include the hard skills development but soft skills development like leadership as well. Recognizing that developing our leadership skills may not lead directly to a bigger paycheck or career advancement, there remains general agreement that this form of self-development is necessary. OH practitioners would generally acknowledge that part of the solution to reducing workplace exposures and disease is linked to the need for greater leadership to the issues. We need to recognize that you can't merely read a book or take a class to hone your leadership skills.

Deciding to become a better leader isn't like deciding to become a member of an organization or deciding to donate money to the food bank at Christmas. Leadership development isn't a single act; rather it is a decision to enter into the practice of leadership. Like yoga, leadership development is a practice; a life-long practice that you decide to commit yourself to recognizing that it is only over time with commitment to purpose and process that leadership skills and techniques, like yoga skills and techniques, are developed.

The first step in the leadership development process is to know yourself. Before you can lead anyone else, you have to be able to lead yourself. Self-investigation can be scary. Most of us don't really want to have to face the truth about who we are (and who we are not). Polonius said it best in Shakespeare's Hamlet when he said, "To thine own self be true". I have often thought about the power of this simple quote in relation to the idea leadership development. To become a leader you absolutely have to know yourself. You cannot lead others, or in fact your organization, if you don't first know yourself. Knowing yourself allows you to lead yourself. Self-leadership leads to the capacity for the leadership of others and organizational leadership, organizational influence and the capacity to drive change.

Knowing yourself means knowing your thinking and behavioural preferences. Your genetic make-up combined with your life's experience during the formative years have shaped you. Some researchers suggest that by the time you are 25 years old you are who you are, and who you are always going to be. Your default thinking and behavioural preferences are just about set in stone now. Your thinking and behavioural preferences can be an asset if understood, or it can be your enemy if not understood. A brief description about thinking and behaviour preferences is provided.

People can't see the way you think, that's obvious. What is going on in your head may be very mysterious to them. Thinking preferences can be characterized as structured, analytical, conceptual, and social.

Analytical thinking is rational, inquiring, and clear. The analytical parts of our brains want data to explain the world around us. People with a preference for analytical thought are considered to be logical, cogent, and objective. They live by the "scientific method" and they learn by mental analysis. Researchers and engineers are the stereotypically analytical thinkers.

Structural thinking is detailed, practical, and methodical. The structural parts of our brains like the rules and are inherently cautious of new ideas. People with a preference for structural thought are considered disciplined, organized, and to a large extent "traditional". They like guidelines, and they learn by doing. Accountants and engineers are stereotypically structural thinkers.



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Social thinking involves caring about relationships, collaboration, empathy, and providing support to others. The social parts of our brains are team-oriented and socially aware. People with a preference for social thought are considered connectors, the consensus builders, and are sensitive to the feelings and ideas of others. The term emotionally intelligence (EI) typically works well to describe social thinkers. They are intuitive about people, and they learn from others.

Conceptual thinking is imaginative, unconventional, and visionary. The conceptual parts of our brains like change, and if not constantly stimulated, become bored easily. People with a preference for conceptual thinking are considered to be the inventors, one-of-a-kinds, and innovators. They have a certain undeniable intuition about ideas, and they learn by experimenting. Failure is not only an option for the conceptual thinkers, it is a key part of their learning experience.

Most people have more than one thinking preference although they usually have a dominant thinking preference. Most people are bi-modal, tri-modal or even quad-modal in their thinking preferences, making for a very complicated set of possible combinations of ways of thinking about things. When you have a preference for a particular thinking attribute, it means it plays a prominent role in your thinking processes.

People do see and notice our behaviours and behavioural preferences. It influences our capacity for effective communication, inter-personal relations, and our capacity to lead. Behavioral preferences can be described as measures of expressiveness, assertiveness and flexibility.

Expressiveness is your level of participation in social situations. Expressiveness is measured on a scale from “quiet” to “gregarious”. Your degree of expressiveness indicates how much interest you show in others and in the world around you. Expressiveness is sharing what you are experiencing on the inside with the outside world. People who are at the quiet end of the spectrum for expressiveness will sit sedately in a meeting, and listen more than they talk. They are considered reserved, pensive, and calm. They avoid the spotlight, keep their feelings to themselves, and are energized by solitude. People who are at the gregarious end of the spectrum for expressiveness are just the opposite! You can’t miss them in a meeting, since they are dynamic, talkative, and lively. They are considered outgoing, animated, and spontaneous. They seek attention, and are energized by interacting with others.

Assertiveness is your level of interest in controlling tasks and results. Assertiveness is measured on a scale from “highly amiable” to “telling” or “driving”. Your degree of assertiveness reflects the amount of energy you invest in expressing your thoughts, feelings and beliefs. People who are at the highly amiable end of the spectrum for assertiveness will wait patiently and politely for an elevator. They are considered deliberate, diplomatic, and friendly. On the other hand, people who are at the telling end of the spectrum for assertiveness push the elevator call button repeatedly, as if that will somehow make it come faster. They are considered competitive, forceful, and tough. They are ready for action, and prefer a fast pace.

Flexibility measures your willingness to accommodate the thoughts and actions of others. Flexibility is measured on a scale from “stubborn” to “servant” (or “others before self”). Your degree of flexibility reflects how much you are willing to conform and flex with the interpersonal needs of others. People who are at the “stubborn” end of the spectrum for flexibility believe they are right and prefer to be in control of others. They are considered firm, intent, and absolute. They have strong opinions and prefer to stay on track. At the other end of the spectrum, people who are at the “servant” end of the spectrum are accommodating, receptive, easygoing, and adaptable. They don’t mind interruptions, ambiguity, or change. They see all points of view, and are accepting of other people’s ideas.



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Knowing yourself is about understanding your thinking and behavioral preferences. Being effective also requires the ability to understand other's thinking and behavioral preferences and being able to accommodate these differences. We can all make adjustments from our preferred way of thinking and we can all behave contrary to our preferred way of behaving, but it is very tiring, and we can only do so for a short period of time. Eventually we fatigue and revert back to our preferred ways. Adjustments to suit any situation are also easiest in calm and controlled (non-crisis) situations. When your leadership skills are needed most, in difficult times or in times of crisis, we all tend to default to our preferred ways of thinking and behaving. It is for this basic reason that for us to truly lead we must know ourselves first.

Once you've stopped waiting to receive directions from others and learn to lead yourself, you're in a position to lead others, and eventually an organization. You can be a [positive influence](#) by acknowledging the good in your teammates and refusing to act in a volatile situation until you've had time to gather the facts. Leadership isn't something that happens - it's a skill set you cultivate and develop. Great leadership happens at all levels of life and with all kinds of people. Leadership is a daily practice and eventually, over time and careful self-scrutiny, you become better and better at it. Recognizing the thinking and behavioral characteristics of others is one of the first steps on your leadership development journey.

Adapted from Emergenetics, LLC, 1991 2010.

Glyn is a partner at EHS Partnerships Ltd. in Calgary, Alberta. He is a consulting occupational health and safety professional. He is a Registered Occupational Hygienist (ROH), a Certified Industrial Hygienist (CIH) and a Professional Engineer (P.Eng.) with over 30 years of experience. Glyn is a regular conference speaker and contributes to Canadian Occupational Safety magazine. He can be reached at gjones@ehsp.ca.



Maintenance Committee Update

By Matt Brewer

As part of our designations, you have no doubt encountered the challenge of determining what points can be used for your maintenance points, and then applying them to your maintenance worksheet. We at the CRBOH have recognized the challenge and how having both a maintenance points and maintenance workshop review committee could contribute to the problem. As such, the Board of Directors recently unanimously voted to merge these two committees together into a new committee called "Maintenance Committee" in order to help streamline the process. We aim to implement a new process to record and catalog your maintenance work. Stay tuned for more updates on this!

We also recognize that this past year has been challenging for everyone to gather points to use for their maintenance. As such, the Board has voted to accept a 15% reduction in maintenance points for the year 2020. This means that for the current and next few years, ROH cycles will require 42.5 maintenance points, and ROHT cycles will require 34. The revised points will be applied to the current cycle, which are due by March 31st. So if you've been holding off sending in your cycle because of concern at having less points, this might help. If you have lost work this past year due to the pandemic, please look at the Leave of Absence policy found on the CRBOH website.



The Exam Committee is looking for ROH and ROHT written exam markers! Both French and English markers are needed. If you are interested, please send your request for consideration to the secretariat at secretariat@crboh.ca and provide any background on work marking exams, and your hygiene experience.



PrOHfiles in our CRBOH Members: Matt MacFarlane, M.H.Sc., CIH, ROH

Written by Krista Thompson, M.H.Sc., ROH, CRSP

Matthew MacFarlane is an ROH based in New Brunswick. Matt attended the University of New Brunswick, and completed his B.Sc. in biology in 2006. After completing his degree, he was investigating different careers to pursue. It was at this time he learned about the field of Occupational Hygiene from his father, who was a provincial OHS Officer in New Brunswick. Matt explains, “I immediately rejected the idea of cleaning stuff but fortunately [my dad] arranged for me to meet his Occupational Hygiene colleagues who helped me understand that a career in OH would: 1) allow me to use science, 2) let me help people, and 3) allow me to have a varied work experience.” Matt was so interested in this field that he was “instantly sold”, and he didn’t waste any time: finishing his applications for the master’s program in Occupational Hygiene that same day.

Matt had some reluctance about attending University of Toronto due to the size of the city and the size of the university. He adds that “coming from a small town, I was hesitant about relocating to ‘the big city’, but the small close knit class and fantastic teachers made my experience memorable.” The Occupational and Environmental Health (OEH) program is a small program, which allows for a more intimate learning experience. As part of the program, students complete a practicum, which started his career for Matt: “my career started with my practicum experience, which helped me land a full time job before I had graduated.”

Matt worked for 12 years at oil refineries, getting a broad base experience in the core Occupational Hygiene elements (chemicals, physical agents, biological hazards). In the oil and gas sector, Matt assessed and control a range of occupational exposures, including: hydrocarbons and complex mixtures (crude oil, benzene); acutely toxic gases (hydrogen sulphide, sulphur dioxide); corrosives (sulphuric acid); particulates and fumes (asbestos, lead, silica, welding fumes); biological agents (legionella, mold); and physical agents (noise, thermal stress, radiation). Matt routinely had to “plan and execute proactive sampling strategies, develop and implement programs, support emergencies and work with a wide variety of trades and personnel.”

With the pandemic, Matt has not done as many traditional Occupational Hygiene field duties. He has pivoted to provide expertise by staying up-to-date on the rapidly emerging knowledge around the novel coronavirus. He clarifies that, “I spent a lot of time helping my organization navigate the complexities of Covid and implementing solutions on the best available science.” The ability to assess risk can always be applied to new hazards, and this skill has become invaluable for Matt to assess and mitigate the risks of COVID-19.

More recently, Matt’s career has changed, now in a corporate role for a regional utility. He is very excited about the challenges ahead, applying his skillset in identifying, evaluating and controlling risk in a new sector.

Finally, when asked about what he sees as the most pressing issues to Occupational Hygiene, Matt is very concerned about the lack of awareness of Occupational Hygiene. “We desperately need to get health back on the minds of workplace leaders. As the world continues to get busier, people are ever more only concerned about the right and now. It is becoming harder to get people to pay attention to risks that ‘might happen’ or that ‘could impact them’. More people die in Canada each year from Occupational diseases than they do from accidents, yet the number of registered Occupational Hygienists is on the decline. We need to learn new skills to communicate health in a way that makes it a burning platform. Perhaps then we can encourage more organizations to hire competent professionals to identify risks, and to commit the time and resources to mitigate them - all in the name of reducing liability and protecting worker health.”

This is the first in what will hopefully be an ongoing series profiling those working in Occupational Hygiene as ROHs and ROHTs, to highlight the many different routes to Occupational Hygiene and the variety of sectors we work in.



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Events in 2021 (Please contact each organization to check timing)

March 24/25, 2021	Toronto, ON	OHAO Spring Symposium & PDC
March 17, 2021	Virtual	AB AIHA Spring Symposium & PDC
May 2021	Boucherville, Qc	42e <u>Congrès AQHSST</u>
May 26-27, 2021	Halifax, N.S.	CCOHS Forum 2021
September 19-22, 2021	Toronto, Ontario	World Congress on Safety and Health
May 24-26, 2021	Dallas/ Virtual	<u>AIHAce</u>
June 10, 2021	Virtual	CRBOH AGM
October 25 & 26 2021	Vancouver	Western Conference on Safety
October (exact dates TBA)	Toronto, ON	OHAO Fall Symposium & PDC