ICOH REPORT 2018-2021





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Editorial support Suvi Lehtinen, Valeria Boccuni, Erika Cannone, Maria Giannitelli Linguistic editing Suvi Lehtinen, Alice Lehtinen Graphic layout Arianna Pagliara

ISBN 978-88-943469-5-4

Rome, Italy 2022

ICOH REPORT 2018 - 2021

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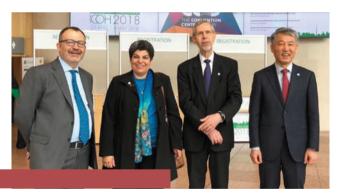
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DUBLIN 2018





ICOH General Assembly





Closing Ceremony

ICOH BOARD AND OFFICERS 2018 - 2021



(seated, left to right) Seong–Kyu Kang, Sergio lavicoli, Jukka Takala, Claudina Nogueira, Kazutaka Kogi; (standing, left to right) Martin Hogan, Shyam Pingle, Maureen Dollard, Seichi Horie, Kari Reijula; (standing, left to right) Stavroula Leka, Frida Marina Fischer, Eun-A Kim, Rosa Maria Orriols Ramos; (standing, left to right) Christophe Paris, Olivier Lo, Paul Schulte, Francesco Violante.

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Working Group on Future of Decent Work

Working Group on Demographic Changes and Occupational Health

Working Group on the Implementation of the Global Strategy of Occupational Health for All with a special reference to global ban of asbestos and elimination of asbestos-related diseases

Working Group on Revision of ICOH Guidelines on Congress Organization

Working Group on Occupational Cancer

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Kari Reijula

Claudina Nogueira

Seong-Kyu Kang

Jukka Takala

Sergio Iavicoli

CHAIR

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Frida Marina Fischer

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Martin Hogan

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International Commission on Occupational Health



ICOH 2022 33rd International Congress on Occupational Health

33rd INTERNATIONAL CONGRESS ON OCCUPATIONAL HEALTH

SHARING SOLUTIONS IN OCCUPATIONAL HEALTH THROUGH AND BEYOND THE PANDEMIC

6 - 10 FEBRUARY 2022 MELBOURNE-ROME GLOBAL DIGITAL CONGRESS

PRESIDENT'S REPORT 2018–2021

By Jukka Takala, President of ICOH

GENERAL

The theme of the ICOH 2018 Dublin Congress was significant: occupational cancer. The conference began with the Opening Keynote by Dr Kurt Straif of IARC/WHO, and was followed by the Policy Forum and related electronic participant polls. It ended with the final **Dublin Statement**¹, listing a number of recommendations on related items. The Congress Statement was also emphasized and followed by scientific peer review journal articles:



- 1. New avenues for prevention of occupational cancer: a global policy perspective by S Iavicoli et al. in the OEM/BMJ Journal² and
- 2. Que retenir du 32e Congrès de la Commission internationale de la santé au travail (CIST-ICOH)? Hot topics in ICOH 32nd Congress by Q. Durand-Moreau et al. in Archives des Maladies Professionnelles et de l'Environnement.³

The theme has also been rigorously followed by the ICOH Working Group on Occupational Cancer (see specific Report).

The ICOH 2018 Dublin Congress was also an excellent opportunity for making contacts, collaborating and carrying out joint actions, with the active and productive participation of WHO, the ILO, ISSA, IOHA, IALI, IEA, IOSH and many other sister bodies and organizations. This was evidenced by the Opening Session, the Policy Forum and specific side conferences, such as that of the WHO Collaborating Centres for Occupational Health.

The new ICOH Board further agreed on specific priorities and a plan of work for the 2018–2021 triennium, which largely followed the former plan of work for 2015–2018. These documents are the baseline for progress until 2022.

The agreed strategies included Evidence, Ethics and Engagement, whose accomplishments to date are divided below according to priorities and items in the plan of action.

PRIORITIES AND ACTIVITIES IN 2018–2021

1. Evidence on death, disability and disease

The burden caused by work-related diseases, disorders and injuries appears to be continuing to grow. In many countries, industrialized ones in particular, the burden is gradually shifting

¹ http://www.icohweb.org/site/news-detail.asp?id=148

² http://oem.bmj.com/cgi/content/full/oemed-2018-105546

³ https://doi.org/10.1016/j.admp.2018.08.001

from traditional injuries and other more easily identified short-term negative outcomes to long latency diseases and disorders at work. This trend is also emerging in middle-income countries, but in the poorer parts of the world it is difficult to see significant progress, and unfortunately, working conditions are often very poor.

The total figures of death and disability at work are increasingly influenced by several issues:

- Improved living conditions mean longer lives, longer exposures and a higher number of long latency disorders.
- Improved knowledge and recording of work-related causes and exposures,
- Continuous globalization is moving industries and jobs to locations in which it is economically advantageous to produce materials and services, i.e. to poorer countries. This results in millions of new, unskilled workers being recruited for new jobs often those that were already dirty, dangerous and demanding in industrialized countries.
- Protection, health and safety measures, policies and enforcement, and occupational health services are failing to keep up with these rapid movements and changes.

ICOH has successfully impacted on many of these processes and has participated in international and national activities by

- continuing collaboration, such as its close contact with the ILO and WHO (see next subtitle 2),
- contributing to policy and practices in European Union institutions and bodies, ASEAN, Mercosur, and other regional intergovernmental bodies,
- contributing to the Global Burden of Disease and Injury estimates (see below),
- contributing to regional and national fact-finding and collaboration,
- collaborating with ICOH's own Institutional, Sustaining and Affiliate Members, and
- acting through Scientific Committees, WGs and TGs (see specific reports).

2. Collaboration with the ILO and WHO

2.1. Promotion of health and safety at work and prevention of occupational diseases

ICOH continues to be an officially recognized NGO for both the ILO and WHO. Collaboration with these organizations through various fora and events has been highly active.

ICOH supports the ILO Global Strategy on Occupational Safety and Health (2003), the ILO Conventions on Occupational Safety and Health, and the WHO Plan of Action for Workers' Health (2007), in collaboration with relevant international organizations.

Further, ILO Convention No. 187 has been specifically designed for promotional efforts which are close to the ICOH mandate. This Convention concerns practically all the items of ICOH work. Earlier key conventions have relied on more traditional, although highly important measures, including Labour Inspection (No. 81), the 'Framework' Convention on Occupational Safety and Health (No. 155), and the Occupational Health Services Convention (No.161).

2.2. World Day for Safety and Health at Work

ICOH issued its statements and presented them to the ILO in various annual events of the

World Day for Safety and Health at Work on 28 April.

ICOH's main aim was to call for and highlight the topics of the World Day set by the ILO, which in 2021 was work-related COVID-19.

As indicated in the recent ICOH statement on 'Safety and Health is a Fundamental Right at Work' in connection with the discussion and decision item at the February 2021 ILO Governing Body, it was emphasized that: '...we have estimated some 60,000 COVID-19 work-related deaths occurred in 2020 and the numbers continue to grow. We anticipate that work-related COVID-19 disease cases will continue to be significantly under-diagnosed and under-reported, for various reasons. The share of infections at workplaces is close to 20% of all infections based on Italian compensation data. These data come not only from the highly exposed health workers but cover a large number of jobs and occupations, which have a significantly elevated risk. Such workers include painters and cleaners at construction sites, drivers, several industry sector workers in mining, manufacturing, and food industries, teachers, day care workers, and other service sector workers...'

See full Statement here.

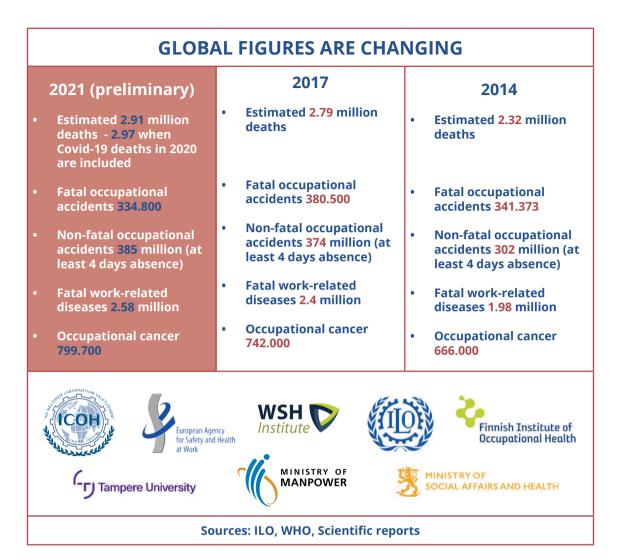
Another ICOH Statement was released in connection with the discussion at the 341st Session of the ILO Governing Body on 22 March 2021 on including occupational safety and health in the ILO's category of "fundamental rights". The ICOH Statement on Occupational Health and Safety as an ILO Fundamental Right at Work can be found here.

2.3. Collaboration in the World Congress on Safety and Health at Work, Toronto 2021

The ILO, in collaboration with the International Social Security Association (ISSA) and the Canadian IWH Institute, held the 22nd World Congress on Safety and Health at Work on 19–22 September 2021 in Toronto.

ICOH was invited to join the Technical Session chaired by Mr Joaquim Nunes, Chief of the Labour Administration and Occupational Safety and Health Branch of the ILO. The session on "Regulating OSH in the Future of Work" was held immediately after the Opening Ceremonies. The presentation included updated information on the Global Estimates based on the previous methodology, and provided data comparable to past ILO Global Estimates (see the "Global figures are changing" figure below).

Meanwhile, WHO had released estimates based on 19 risk/outcome pairs amounting to close to 2 million deaths in 2016. The numbers contributed by ICOH were based on wider-ranging 115 risk/outcome pairs and related to population attributable fractions. There is no real conflict between the various estimates; it is more an issue of deciding what type of evidence is sufficient. The absence of global and fully comparable evidence is not evidence of absence.

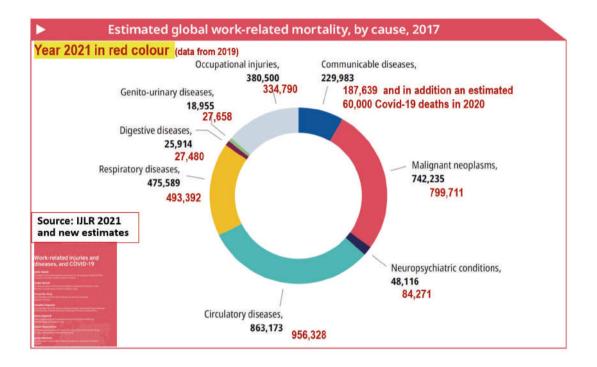


Detailed collaboration activities with WHO and the ILO

ICOH participated in several physical and virtual meetings with the ILO and WHO in Geneva and maintained constant communication with both, by

- expressing continuous interest in collaboration,
- promoting specific programmes and placing great emphasis on occupational cancer, the ICOH 2018 Dublin Congress theme, and the Dublin Statement,
- starting a new initiative at the ILO-ISSA-Singapore World Congress in 2017 to establish a new Global Coalition on OSH. The initiative was proposed by the Finnish Minister and initially also had WHO in the Steering Committee. The ILO has held a number of physical and virtual Meetings (see details at https://www.ilo.org/global/topics/safety-and-healthat-work/programmes-projects/WCMS_740967/lang--en/index.htm),
- being systematically present at WHO's World Health Assembly both physically and during

- COVID-19 virtually. A number of written and spoken Statements have been presented and posted in this highest decision-making body of WHO. These statements have emphasized the work-relatedness of health issues, the need for universal occupational health care for specific vulnerable groups of workers, such as those exposed to pathogens causing COVID-19 (see ICOH Statements at WHO fora at ICOH News, such as at the 74th World Health Assembly: http://www.icohweb.org/site/news-detail.asp?id=198),
- accepting the ILO's request to contribute a scientific paper to their International Journal of Labour Research (for the latest updated figures, see the figure enclosed and the ICOH contributions. The full paper can be accessed here by selecting pages 27–48 of the International Journal of Labour Research: COVID-19 and Recovery),



The ICOH President accepting the invitation of the ILO to chair the ILO Meeting of Experts to Discuss and Adopt the Draft Code of Practice on Safety and Health in Textiles, Clothing, Leather and Footwear for a full week in October 2021. This was the first ILO Meeting of Experts in which eight Experts nominated by governments, eight Experts nominated by employers' organizations, and eight Experts nominated by workers' organizations from all regions of the world physically came to the ILO Geneva Headquarters after COVID-19 restrictions were reduced. The purpose was to find a reasonable compromise on some 150 pages of text with experts of different backgrounds and interests. The result of the Meeting was that all the Experts adopted the Code of Practice in consensus (see https:// www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_822368/lang--en/index.htm). The adopted Code is also available in French and Spanish and is accessible from this link.

• Renewing all key contacts within the ILO and having a thorough discussion with the ILO Director General, Mr Guy Ryder, who agreed to provide the ILO's Address in the Opening Ceremony of the ICOH 2022 Congress. Dr Tedros Ghebreyesus, Director General of WHO also agreed to join the Ceremony.



ILO Director General Mr Guy Ryder and ICOH President Jukka Takala at discussions in ILO DG's Office in Geneva in October 2021

3. Dialogue, engagement and research with institutions, ICOH Affiliate and Sustaining Members, and sister NGOs

Institutional collaboration between ICOH Sustaining Members and Affiliate Members needs further revitalizing. Although a number of contacts, meetings, conferences, and discussions have been held, we need to plan how the collective members can be better linked to ICOH action.

ICOH maintained and enhanced contacts, planned projects and held discussions with many other institutions and associations:

- The Sheffield Group, consisting of global safety and health institute leaders many of them ICOH Sustaining Members – organized a meeting in Germany which included discussions within the IFA Institute of the German Mandatory Social Injury Insurance Scheme (DGUV). Here ICOH continued to identify better institutional collaboration based on the past Tokyo discussions and meetings in Sankt Augustin and Bonn in 2018.
- The same Group met in Montreal and Quebec City, the meeting organized by l'Institut de Recherche Robert-Sauvé en Santé et en Sécurité du Travail (IRSST), a long-time Sustaining Member of ICOH. This Institute had just been externally evaluated by an international team of experts including ICOH, and found to be an exemplary institute in the field of occupational safety and health. This understanding was further confirmed by the Montreal/Quebec Meeting in 2019.
- Collaboration continued with national governments and institutes and related bodies, such as:
 - The Swedish Work Environment Authority and the newly established Swedish Agency for Work Environment Expertise (SAWEE) – leading to a major public discussion on occupational health in Sweden, and with the Finnish Ministry of Social Affairs and Health.
 - The Finnish Institute of Occupational Health's international Vision Zero Congress in Finland.
 - The Italian Instituto Nazionale per l'Assicurazione contro gli Infortuni sul Lavoro, INAIL, the host of the ICOH Secretariat General. I cannot overemphasize the crucial role of INAIL in supporting ICOH in terms of physical, material, financial and its highly competent and dedicated human resource support. A series of meetings and discussions was also hosted by the INAIL Headquarters with the Moroccan organizers of the ICOH 2024 Congress in Marrakesh.
- The ICOH triennial congress organization was originally planned to be in Melbourne in 2021. The COVID-19 pandemic made it impossible for Melbourne to host the normally live Congress event. After postponing the Congress and related ICOH events to 2022, the ICOH Board decided to hold a fully online Congress with two time slots, one for Rome and the other on Melbourne time. The financial responsibility was taken over by the ICOH Secretariat, supported by Melbourne colleagues, Prof. Malcolm Sim and his team. ICOH 2022 Congress arrangements were proceeding at full speed at the end of 2021. The ICOH 2022 Congress theme is: "Sharing Solutions in Occupational Health through and beyond the Pandemic".
- The ICOH 2024 Marrakesh arrangements are progressing well and ICOH has supported several national events to ensure full government and national tripartite involvement for occupational health in Morocco and to prepare the ground for committed national support for ICOH 2024.

- The Ministry of Manpower and the Workplace Safety and Health Institute in Singapore have continued to provide support for various ICOH activities.
- European institutions: the European Commission, the European Agency for Safety and Health at Work (EU-OSHA), EUROSTAT, the European Economic and Social Council (EESC), the European Chemicals Agency, and the European Parliament: ICOH's engagement with these has been related to
 - 1. the economic costs of poor health and safety at work, several meetings,
 - 2. establishing a new artificial intelligence-based exposure survey in the EU,
 - 3. collaboration with the European Commission and EU-OSHA for continually enhanced data and statistics,
 - 4. the joint project with EUROSTAT on under-reporting of occupational accidents in the EU. This has resulted in an innovative statistical report on how to obtain better estimates of non-fatal occupational accidents, which are often severely under-reported in many or most EU Member States. The latest EU-wide EUROSTAT meeting was held in October 2021,
 - 5. the EU-wide project, in which the European Economic and Social Council (EESC) requested ICOH to act as a member of an expert panel on the topic of "Asbestos at Work in Energy Renovation" (see also Report of the WG on Occupational Cancer),
 - the European Union Presidency Conferences on Occupational Cancer, two major tripartite Conferences, one held in Vienna in 2018 by the Austrian EU Presidency country, and the other in Helsinki by Finland as the EU Presidency country. Germany will take over the follow-up of the Roadmap of Carcinogens – Process in 2020 (see the ICOH Report on the Working Group of Occupational Cancer for further information).
- The European Commission asked the European Chemicals Agency, ECHA to propose a scientific basis for enhanced measures to control asbestos risks in infrastructure and renovations of building structures containing asbestos. One key item was to propose justification for a new exposure limit value for those working on asbestos removal and other similar risks. The European Union banned the new use of asbestos in 2005 but past exposures continue to cause an increasing number of deaths and disability-adjusted life years. ICOH has already proposed and advocated a new exposure limit value of 1000 fibres/m3, and this was discussed in two ECHA Committee on Risk Assessment meetings, which included ICOH's verbal and written comments.
- The new asbestos regulatory measures were taken further to the European Parliament, EP. The EP voted for the "European Strategy for the safe removal of asbestos" – 675 votes in favour, 2 votes against and 23 abstentions – on 20 Oct 2021. It calls for a concrete asbestos Occupational Exposure Limit (OEL) of 1000 fibres/m3. This is based on the ICOH proposal already established in a scientific article on "Global Asbestos Disaster" and further advocated by ICOH at the European Chemicals Agency's Risk Assessment Committee, and at the European Parliament Webinar for Parliamentary Groups. The European Parliament Strategy could act as a model for other countries and regions globally.
- Collaboration has continued with all ICOH's sister bodies. In particular, joint Statements were agreed on with IOHA and IEA at both World Health Assemblies in 2018, 2019, 2020 and 2021 (IOHA support was not recorded by WHO as their NGO Status was discontinued).

- The IOHA Congress was held in the Republic of Korea in September 2021 and was strongly supported by ICOH's Opening Address and a presentation on Work-related Diseases.
- A further Meeting in Quebec City in Canada, organized by the Quebec State authorities and supported by the IRRST Institute in Montreal.
- IOSH has been a special contact of ICOH on the topic of occupational cancer (see special report).
- The ILO, the Institute for Work & Health (IWH) and the International Social Security Association (ISSA) jointly organized the XXII World Congress on Safety and Health at Work in Toronto, held virtually in September 2021. ICOH had the opportunity to join a key session immediately after the Opening Ceremony, related to Regulatory Measures on Occupational Safety and Health and chaired by the ILO. ICOH also joined a symposium/ side event on the Future of Work with Nordic countries and others.
- Collaboration continued with the Institute of Health Metrics and Evaluation (IHME) in charge of the Global Burden of Disease and Injury, GBD process, at the University of Washington, Seattle, USA.
- This included continuous contact with and contributions to IHME/GBD outputs, regarding occupational cancer in particular (see special Report on Occupational Cancer). A group of ICOH experts led by Dr Tim Driscoll has continued to follow the GBD process, and several other contributors from ICOH are listed as GBD Collaborators in papers published by The Lancet.
- Occupational health nurses (OHN) form a key group of professionals within ICOH. The Federation of Occupational Health Nurses of the EU, FOHNEU, held their 7th International Congress in Budapest in late April 2019, their theme being "Workforce Health = National Wealth". ICOH presented a keynote address.
- The 54th Congress of the European Societies of Toxicology (EUROTOX 2018) asked ICOH to present a keynote on toxicology-related achievements in occupational health and this took place in September 2018 in Brussels, Belgium. The successful outcomes presented included the Globally Harmonized System for the Classification and Labelling of Chemicals, ILO Conventions and Codes, the Joint International Programme on Chemical Safety, WHO Criteria documentations and Chemical Safety Data Sheets, the IARC Classification, and EU REACH. ICOH has played a role in nearly all these successes.

Collaboration with Affiliated Members included conference keynotes and joint meetings with national associations, ICOH National Secretaries and local ICOH Members:

- The Society of Occupational and Environmental Health Physicians of Nigeria, SOEHPON an Affiliate Member of ICOH – held their Annual Conference, Annual General Meeting and specific training-related occupational health activities on 6–10 November 2018 in Lagos. As a relatively limited number of African countries have the capacity and resources to arrange such conferences, Nigeria led the way and provided a model for how to highlight occupational health in an African country. A further presentation and the "Goodwill Message of the ICOH President" can be accessed in this link. A similar Message was also given virtually in the SOEHPON Annual Conference in December 2020.
- SASOM-MEDICHEM Joint Conference, Meeting of ICOH Officers and Meeting ICOH National Secretaries in South Africa.
- The South African Society of Occupational Medicine, with the ICOH Scientific Committee on Hazardous Chemicals, MEDICHEM held a Conference on Substances Hazardous to

Health. ICOH Officers gave several presentations at this event. A fruitful discussion was also held with many ICOH National Secretaries located in Africa on how best to support national ICOH action in Africa.



Support for various collaborative institutions:

- Latin American Associations, in particular
 - 1. ASOMET, Asociación de Medicina del Trabajo Conference in Guatemala in June 2021
 - 2. LSO, Asociación Latinoamericana de Salud Ocupacional, XVII Congreso ALSO in October 2021
 - 3. ANAMT, Associação Nacional de Medicina do Trabalho, International Symposium, Sao Paulo, Brazil, October 2021
- AOSHRI, Asian Occupational Safety and Health Institutes Conference in Daegu, Republic of Korea, September 2021
- ORP Conferences in Barcelona, Cartagena, Sevilla on Vision Zero, March-September 2021. ICOH also received the ORP Award.
- "Scale and Costs of Work-related Harm" presentation by Prof. David Walters, Cardiff University
- APIL Association of Personal Injury Lawyers Conference on Asbestos Exposures, September 2019
- European Asbestos Forum in the Netherlands, November 2019
- Taiwan Occupational Hygiene Association, Taiwan Environmental Medicine Association Conference, April 2021

ICOH Officers and ICOH Board Members also attended a number of similar activities (see Other specific reports, ICOHweb and ICOH Newsletters).

4. Progress in the ICOH Code of Ethics

The revised version of the ICOH Code of Ethics is available in many other languages as well as the official English and French: Portuguese, Spanish, Italian, Chinese, Japanese, Turkish and Estonian. All translations are available for consultation on the ICOH website, www.icohweb. org . These works are the result of a process carried out by dedicated Working Groups, which have continued to make important contributions to the dissemination of the Code. Detailed information on the progress of Ethics and its promotion in practice is provided in the Report of the ICOH Ethics and Transparency Committee.

5. Summary of finance issues, membership development, information and networking through icohweb and social media

The economic development of ICOH has remained stable thanks to the coordinated efforts of the Secretary General, the ICOH General Secretariat and the Finance Committee. Since 2018, ICOH finances have been in balance, as both incomes and expenses have remained in line with expectations.

Intensive efforts have been made to increase ICOH membership and strengthen information activities, following on from the actions of the previous triennium.

However, the forthcoming ICOH 2022 Congress will be both an organizational and financial challenge, and a possible burden in 2022.

See special reports for further details.

6. Conclusion

The implementation of ICOH plans and priorities is progressing well in terms of engagement and excellent connections with key organizations and institutions. It is quite challenging for all the ICOH active members, in particular the General Secretariat and the Officers, to simultaneously run the present action programme of the Triennium, to carry out the preparatory work for the forthcoming virtual ICOH 2022 in Melbourne and in Rome, and to plan the next ICOH 2024 Congress in Marrakesh, Morocco.

Contact with the ILO and WHO has been frequent, but the resources dedicated to occupational health and safety in these UN bodies have not been ideal for either organization.

The need for further improvements may require discussion on the following items in the future. How can ICOH

- collaborate more closely with ICOH's Institutional, Sustaining and Affiliate Members?
- further improve visibility, public access to and interest in ICOH and its institutional knowledge and information?
- enhance its impact on policy-makers in terms of, for example, institutionalizing occupational health services and improving regulatory and enforcement measures?
- strengthen its membership, extend accessibility, promote equity on a global basis, and take further action to increase the inclusion of young professionals in the ICOH network?











Professor Bengt Knave received the ICOH Lifetime Achievement Award







REPORT OF THE SECRETARY GENERAL

Professor Sergio Iavicoli

"Nous, les anciens, transmettons aux Jeunes le flambeau, allumé durant une vie consacrée à la Médecine du Travail, parce que la vie est à monter toujours plus haut, pas à descendre" ¹

"We, the veterans, transmit to young people the strength of the flame, burning over the course of a life dedicated to occupational health, on the grounds that we are meant to advance ever further and further in life, and never go back."

(¹ Luigi Carozzi, ICOH Secretary General 1906– 1957, Farewell address as Secretary General at the Opening Ceremony, Helsinki 1957)



Secretary General's end-of-term remarks

During the 2018–2021 tenure, which is now drawing to a close, we faced an exceptional time in human history. It also had profound impacts on the world of work, including occupational safety and health issues. The spread of the COVID-19 pandemic has led to radical changes in people's habits, affecting every sphere of social and working life. In order to contain the pandemic at the global level, workers' safety and health has become an essential main concern, demanding new prevention and control measures in workplace settings. In this respect, the reorganization of workplaces, the protection of vulnerable workers, and epidemiological surveillance measures have indeed proved themselves highly effective in preventing the spread of the virus.

The ICOH 2018–2021 tenure closes with a one-year delay ¹, leaving behind an extremely difficult period, which nonetheless represented a unique challenge in terms of pushing ahead with issues related to the health and safety of workers worldwide, and calling for prompt actions to strengthen preventive measures at the workplace.

Two years after the pandemic outbreak, we can claim that ICOH held out, adapting its activities and objectives to the new context, supporting the fight against COVID-19 in its area of competence (OSH), and cooperating in the studies and projects activated by the World Health Organization (WHO) and the International Labour Organization (ILO) during the state of emergency. A few months before the Congress, we can be satisfied with the work undertaken jointly and with great dedication, as well as with ICOH's emergency response to the pandemic. It is worth mentioning in this regard that, throughout recent history, tragic

¹ On 16 April 2020, the ICOH Board took the formal decision to postpone the 33rd ICOH Congress on Occupational Health from 21–26 March 2021 to 6–10 February 2022. Consequently, the end of the current term was extended until the ICOH 2022 Congress.

events such as the two world wars have had a great impact on our organization, forcing it to shut down complete temporarily. This time, again as a result of the Officers' and the Board's decisions which they made with a great sense of responsibility, we are able to hold the triennial Congress, in the form of a totally digital event. This decision was taken in order to achieve the dual purpose of meeting the expectations of our membership and preserving ICOH's finances, considering that the revenues from ICOH triennial congresses (extra fees) together with the membership fees represent the main source of self-funding for the ICOH organization. We are confident that the ICOH 2022 digital Congress will be a successful event as it was in its previous editions.

My experience as ICOH Secretary General started in 2003 and is now coming to an end after almost 19 years of activity. It has been an important part of my professional and personal life. It has been a privilege for me to be able to serve in the oldest and largest professional scientific organization in the field of occupational health. I can no longer hold this position due to a new high position in the Italian Ministry of Health. My resignations are permeated with a mixed feeling of nostalgia for this chapter now closing and satisfaction with the achievements collected during these long years of work. Nevertheless, although I no longer have formal position, this is not the end of my commitment and active engagement in an organization I have always believed in, and that I have tried my best to support. My collaboration with ICOH will continue in the years to come, and in ICOH live my strongest feelings as a professional and scientist.

The Secretary General is responsible for membership matters and budget management, in close collaboration with the Officers. It is a task that requires continuity and support, and this is why there have been only seven Secretary Generals since 1906.

First of all, during my period as Secretary General, the historical role of ICOH as an international non-governmental professional society that is particularly active in the area of advocacy activities and policy advising has been revived and strengthened. In this respect, it is worth mentioning the ICOH contribution to the development and implementation of the WHO Framework Convention on Tobacco Control (FCTC), the Centennial Declaration, the Cancun Charter on Occupational Health for All, the Helsinki Declaration on Management and Elimination of Asbestos-related Diseases, and the Seoul Statement on the Development of Occupational Health Services for All.

In addition, ICOH membership has increased and number of members from low- and middleincome countries has grown significantly. My first initiative as Secretary General in 2003 was the introduction of a differentiated fee system, approved by the General Assembly, with lower costs for members from low- and middle-income countries, students, and retirees. This initiative has led over time to the growth of the organization's spirit of transparency, inclusion, and equity.

Thanks to this system, beyond the growing number of members representing increasingly more countries, ICOH has witnessed an increased participation of OH experts from low- and middle-income countries, a better gender balance, and more active participation of young members.

In addition, the finances of the organization have been secured, thanks to the wise management of economic resources and transparent reporting of balances.

Also, thanks to the support of the National Institute for Occupational Safety and Prevention (ISPESL) first, and then the Italian Workers' Compensation Authority (INAIL), it has been possible to create a growing network of international and governmental organizations supporting the ICOH activities, including the organization of ICOH Congresses. This has also been the case with the forthcoming ICOH 2022 Congress, which will take place on 6–10 February 2022 despite the pandemic, in an extraordinary digital format.

I am confident that ICOH will continue its growth in the spirit of transparency, inclusion and equity. When I started my experience as Secretary General, ICOH was recovering from a difficult period characterized by controversies regarding transparency and possible conflicts of interest.

I believe that our work in promoting independent evidence-based science and advocating measures to protect workers' health has been a key strategy for delivering important outputs in ethics and policy. The new rules and changes to core documents made over time thanks to work with the Officers and the Board has contributed to bringing ICOH the standing of the most important non-governmental organization in occupational health globally. In particular, I would like to acknowledge Professor Jorma Rantanen, my great mentor and friend, and the other Presidents with whom I have had the privilege to work, Dr Kazutaka Kogi and Dr Jukka Takala. I am deeply grateful to all of them for their work and collaborative spirit. Without their support, I would not have been able to carry out my tasks.

I would also like to extend my gratitude to all the Vice-Presidents with whom I have worked: Alain Cantineau, Ruddy Facci, Bonnie Rogers, Marilyn Fingerhut, Seong-Kyu Kang, Claudina Nogueira, and Suvi Lehtinen. They are all excellent people and qualified professionals with whom I have collaborated and who share the common view of protecting workers' health.

I would also like to thank all the members serving on the Board since 2003, the Scientific Committee Chairs and the National Secretaries, and of course, the entire ICOH membership.

Special thanks are also due to my excellent co-workers, the ICOH Staff, for representing the driving force of the Secretariat over these nineteen years: Valeria Boccuni, Erika Cannone, Pierluca Dionisi, Carlo Petyx, Antonella Oliverio, Pasquale Fruscella, Bruna Maria Rondinone, Fabio Boccuni, Caterina Barillari, Sandra Manca, Cristina Di Tecco, Antonio Valenti, Barbara Zancocchia, and Daniela Sansò.

I wish all the best to the new Secretary General taking office at the ICOH 2022 Congress.

Serving society by protecting workers' health is a great privilege and responsibility.

ICOH Secretariat activities

The Secretariat General assures the daily management of an NGO with around 2000 members from over 100 countries worldwide. It is in charge of all the tasks set out in the ICOH Bye-Laws 5, Section 3. These include the following main activities: coordinating actions

for membership recruitment and sustainability during the triennium, keeping regular contact with ICOH members and supporting them in all membership matters, taking care of ICOH financial management, and implementing and constantly updating the ICOH website contents and tools. The Secretariat General also liaises regularly with the ICOH Officers, Board members, Scientific Committees and National Secretaries to carry out all the activities in accordance with the triennial plan of action. ICOH is in official relations with WHO and the ILO and is in frequent contact with these two entities in order to develop joint measures for common goals.

a) Membership

The total number of ICOH members in good standing for the current term is **2107** (**+6.7%** with respect to the membership at the end of the previous triennium, and **+26%** with respect to the end of the triennium 2000–2002) (Figure 1).

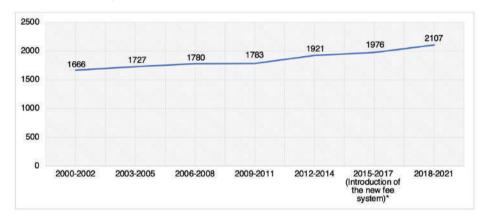


Figure 1. ICOH membership trend from 2000 to 2021.

* The new fee system was approved by the General Assembly during the ICOH 2015 Congress and was adopted for the 2015–2017 triennium on an experimental basis. It was developed in order to increase accessibility for developing countries, considering the changes in the global economy. The proposal was to extend benefits for retired and young members to all countries – the previous fee system conceded benefits to these categories in industrialized countries only. The most important innovation was the division of countries into three groups on the basis of their GDP per capita: countries with a GDP below 5000 USD; countries with a GDP between 5000 and 15 000 USD; countries with a GDP of 15 000 USD or more.

The results achieved in terms of retention and recruitment of membership are remarkable, and in line with the trend of the last triennia. The current term has covered a longer period than usual (four years instead of three) due to the postponement of the Congress to 2022 because of the COVID-19 pandemic. The 6.7% increase in membership at the end of this tenure is a very satisfactory outcome. Such a result shows a very positive response from members, considering that half of the term was overwhelmed by the pandemic and its effects.

One of our priorities remains the monitoring of the average age of ICOH members. For the current term, the average age of the total membership remains in line with that of the previous triennium (55.6 years as of 17 November 2021), yet it should be noted that active

members' average age is 52. The recruitment of new members, especially early-career researchers, is also having a positive effect on average age data: the average age of new members is 46.3. We are confident that this positive trend will continue in the new triennium.

Table 1 displays the membership figures as of 17 November 2021.

Table 1. ICOH membership as of 17 November 2021.

Membership Type	No. as of 17 November 2021	
Individual members in good standing	2039	
Honorary	25	
Collective members in good standing		
Affiliate	25	
Sustaining	18	
TOTAL	2107	

Table 2 displays the 12 leading countries in ICOH membership.

Table 2. ICOH members in good standing per country.

Country	Number
1) India	194
2) USA	122
3) Japan	114
4) Italy	112
5) Brazil	92
6) Australia	70
7) South Africa	69
8) Peru	66
9) Mexico	62
10) Finland	55
11) The Netherlands	45
12) Indonesia	45

Geographical distribution of ICOH members

Another major outcome was the continuous increase in members from low- and middle-income countries (Figure 2).

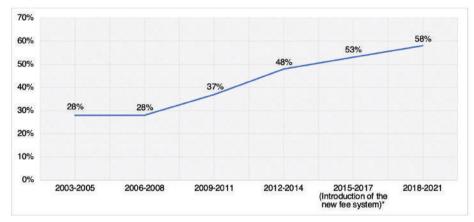


Figure 2. Progressive increase in ICOH members from low- and middle-income countries (2003–2021).

* The new fee system was approved by the General Assembly during ICOH 2015 Congress and adopted for the 2015–2017 triennium on an experimental basis. It was developed in order to increase accessibility for developing countries, considering the changes in the global economy. The proposal was to extend benefits for retired and young members to all countries – the previous fee system conceded benefits to these categories in industrialized countries only. The most important innovation was the division of countries into three groups on the basis of their GDP per capita: countries with a GDP below 5000 USD; countries with a GDP between 5000 and 15 000 USD; countries with a GDP of 15 000 USD or more.

After two triennia with the current fee system in place, we can observe its positive impact in terms of geographical distribution. Interestingly, members from low- and middle-income countries now represent over half (58%) of the total membership (Figure 3).

The active role of the National Secretaries in the countries that have supported the membership recruitment campaign conducted by the Secretariat has certainly contributed to this achievement.

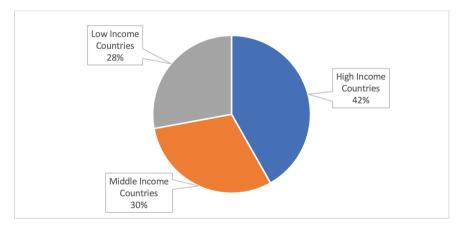


Figure 3. Geographical distribution of ICOH members (as of 17 November 2021).

More detailed information on ICOH membership activities and results are reported in the Report of the ICOH Task Group on Membership.

b) Representation at national and international meetings

In addition to the activities described above, the Secretary General carries out other strategic initiatives and participates as the ICOH representative in many national and international meetings. At the national level, the Secretary General is usually involved in ICOH meetings organized by the Italian National Secretary and other events promoted by Scientific Committees or attended by ICOH members. At the international level, the Secretary General participates in meetings and conferences that are strategic for implementing both the ICOH triennial work plan 2018–2021 and the ICOH triennial collaboration plan with the World Health Organization (WHO). A summary of the main international events attended by the Secretary General in the first half of the triennium is given below.

Global Conference on Primary Health Care, Astana, Kazakhstan, 25–26 October 2018

ICOH was invited to contribute to the Parallel Session on "Intersectoral Approach to Primary Health Care and Population Health Management – Policies, Interventions and Services" in the Global Conference on Primary Health Care in Astana, Kazakhstan, on 25–26 October 2018. The aim of the Conference was to celebrate the 40th anniversary of the Alma Ata Declaration on Primary Health Care (1978) and to recommit towards the Universal Health Coverage also by releasing a new Declaration (the Astana Declaration) to strengthen Primary Health Care as an approach to modern health and to orient society and health systems to maximize health and well-being with equity. In collaboration with Dr Ivan Ivanov (WHO, Department of Public Health, Environmental and Social Determinants of Health, Designated Technical Officer for ICOH/WHO relations), a document was drafted for presentation by the Secretary General in Astana. In line with the spirit of the Alma Ata Declaration, "to bring health care where people live and work", this document supported the inclusion of occupational health in primary health care settings, underlining the importance of ensuring specialist training for the health workforce involved in delivering primary care whenever OH physicians or OH services are not available.

High-level Meetings on Universal Health Coverage – "Universal Health Coverage: Moving Together to Build a Healthier World", 29–30 April 2019 and 23 September 2019, New York City, USA

On 23 September 2019, ICOH Secretary General Professor Sergio lavicoli participated in the High-level Meeting at the United Nations, for the adoption of the UN Political Declaration on Universal Health Coverage by Heads of State and Government. As declared by Dr Tedros Adhanom Ghebreyesus, Director General of WHO, "This declaration represents a landmark for global health and development". ICOH was involved throughout the drafting process and proposed the inclusion of occupational health in the declaration during the High-level Meeting on Universal Health Coverage, held in New York on 29–30 April 2019. The declaration was approved on 23 September 2019 and included the ICOH proposals below:

- paragraph 38: "Scale up efforts to promote healthier and safer workplaces and improve access to occupational health services, noting that more than 2 million people die every year from preventable occupational diseases and injuries";
- paragraph 64: "Take necessary steps at the country level to protect health workers from all forms of violence, attacks, harassment and discriminatory practices, and to promote their decent and safe working environment and conditions at all times as well as ensure

health workers' physical and mental health by promoting policies conducive to healthy lifestyles"

The declaration also includes other items that are relevant to occupational health. This was an important outcome, and was achieved through ICOH's efforts and WHO HQ's work, particularly that of Dr Ivan Ivanov (WHO) and the Assistant Director General Ranieri Guerra, who has been very sensitive to workers' health. The ICOH community will continue to support the UN agencies and WHO in the implementation of actions to advance universal health coverage.

International Conference of Occupational Health Services – Taipei, 2–3 September 2019

The ICOH Secretary General was invited to speak at the International Conference of Occupational Health Services, an event that focused on mental health, held in Taipei on 2–3 September 2019. On this occasion, Professor lavicoli gave two lectures on mental health, one on work-related stress and the other on psychosocial risk factors. A satellite meeting was also organized with the ICOH Senior Members from Taiwan in order to determine the new Secretary. The meeting was very productive, and the process was completed successfully with the appointment of Prof. How-Ran Guo.

WHO roundtable "Healthier and Safe Workplaces for All Workers: Delivering as One", Geneva, Switzerland, 28 November 2019

The ICOH Secretary General was invited to attend the WHO roundtable "Healthier and Safe Workplaces for All Workers: Delivering as One", which took place at the WHO Headquarters. The roundtable aimed to map the global efforts of WHO and its international partners to promote healthier and safer workplaces and to identify a set of short-term strategic actions at the global level to boost the scaling up of efforts to promote healthier and safer workplaces in line with the commitments of the UN High-level Meeting on Universal Health Coverage.

International Conference on "Future of work. Challenges and opportunities for occupational health and safety", Rome, Italy, 12 February 2020

On 12 February 2020, the International Conference "Future of work. Challenges and opportunities for occupational health and safety" was held in the magnificent setting of the Protomoteca hall in the Campidoglio, Rome. The Conference was jointly held by ICOH and INAIL, under the patronage of the Municipality of Rome, in conjunction with the ICOH Midterm meetings. The event gathered international experts who addressed the challenges of the changing world of work, placing the spotlight on demographic changes and rapid technological development. The speeches focused on an actual detailed analysis of the current context and discussed the future perspectives in the field. Topics presented also included: working in the 24-hour society, artificial intelligence and robotics, the gender gap, migrant workers, stress and mental health, age management. The speakers emphasized the importance of the consequences of demographic changes, technological advances, and the globalization of markets. Occupational health and safety need to maintain their central role in this scenario, taking advantage of the opportunities presented, while managing the new needs introduced by technological innovation.

c) ICOH contribution to the ongoing battle against COVID-19 around the world

During these difficult times of the COVID-19 pandemic, even if forced to cancel all its planned face-to-face events, ICOH has continued its networking activities and participated in international initiatives to support the COVID-19 response and strengthen health systems worldwide.

ICOH-IEA Statement at the 73rd World Health Assembly, 18–19 May 2020

On the occasion of the 73rd World Health Assembly of 18 May 2020, ICOH submitted a statement on the occupational risk posed by the SARS-CoV-2 virus, in collaboration with IEA and IOHA. The statement is available at

http://www.icohweb.org/site/multimedia/news/pdf/ICOH%20-%20IEA%20statement.pdf

ICOH Survey on COVID-19 for National Secretaries/Contact Persons

In July 2020, ICOH launched a survey to collect information on public health policies, prevention measures, and other policies that the governments of countries worldwide have put in place to contain the pandemic. The survey was administered to 113 respondents, both ICOH National Secretaries and other senior OSH experts through the dedicated webbased platform SurveyMonkey. The collected data covered the period from the beginning of the pandemic in each country to 30 June 2020. The survey results will be published through the ICOH channels and may be used for analysis and benchmarking at both national and international levels.

d) Secondary Analysis of the 2018 ICOH Survey

One of the major strategic goals of the previous triennium was the development of a specific survey addressed to the entire ICOH membership in good standing as of 31 December 2017, which investigated the contribution of ICOH to OSH at the national and international levels and members' satisfaction with ICOH scientific activities, benefits and tools, etc. Thanks to the survey, useful information was gathered on the role of the Scientific Committees and National Secretaries, the use of ICOH's communication tools and website, and participation in international congresses.

Thanks to the participation of 384 respondents from 79 countries, the study had wideranging geographical representativeness. During the current tenure, a secondary analysis of the survey results was carried out. As a result, the "2018 ICOH Survey – Final report. Contribution of ICOH to occupational safety and health (OSH); Members' satisfaction with ICOH scientific activities, benefits, and tools" will be released in conjunction with the ICOH 2022 digital Congress through the ICOH channels. The Report gives an exhaustive description of the survey results. The findings have contributed to identifying the needs and perceptions of members with respect to ICOH's commitment in the OSH sector and will be useful to better target the scientific activities of ICOH in the years to come. Some of the outcomes are reported below.

With specific reference to the Scientific Committees section of the questionnaire, the respondents widely acknowledged the active role of these committees in terms of organizing

meetings/events and membership promotion activities. The respondents prioritized the production of guidelines and interaction among Scientific Committee members as activities that they would like to see improved (Figure 4).

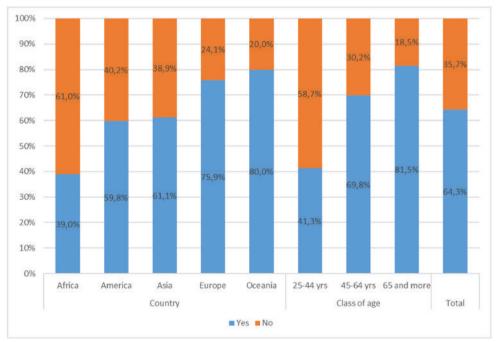


Figure 4. - Which of these activities would you like your Scientific Committee to improve?

In regard to the National Secretaries section. the majority of the respondents aware their of role are of and their contribution within ICOH in terms of organizing meetings/events and membership promotion activities. At the same time, the survey highlighted the need for more regular contact between the National Secretaries and country members.

The survey also looked into the participation of members in the Triennial Congresses and revealed a statistically significant association between participation in the Congresses and class of age/country: the rate of participation increased proportionally to the members' age and the country's GDP (Fig 5).





e) ICOH Heritage Repository

One of the activities of the triennial plan was the creation of a repository of the ICOH Congress proceedings, starting from its foundation (1906) to the present time, with the aim of presenting the available documentation in an organized and interrelated system. On the occasion of the centenary Congress in 2006, a first catalogue and digitalization of the proceedings was created by the Clinica del Lavoro of Milan. The aim of this new project was to complete the digital version of the single proceedings and create a web edition of the complete corpus of the ICOH Congresses. The result was the creation of a structured Repository containing a series of shared metadata in open access and with tools for semantic research.

As a result of this two-year project, the ICOH Heritage Repository was released in February 2020. It consists of more than 20,000 downloadable scientific papers in Acrobat Reader format and more than 50,000 listed authors. Therefore, the Repository represents the most complete collection of scientific contributions in Occupational Medicine available today. Searches can be carried out by mixing three search keys: "author", "title", and "year" of the scientific contribution. The "body content" field can also be used to search for the words in the whole text of the papers of all the conferences. This makes the Repository an extremely complex and innovative tool, based on effective indexing that can provide results in a more systematic way than the majority of similar existing archives. The Repository is accessible from a dedicated box on the homepage of the ICOH website (http://repository.icohweb.org/)



f) Activities related to ICOH International Congress organization

The Secretariat also coordinates the activities related to the organization of the ICOH Triennial International Congress, including the follow-up of previous congresses, the planning of future congresses, agreement on congress fees, contracts, the preparation and management of elections and the bidding processes, and the preparation of ICOH business meetings to be held in conjunction with the congress, etc.

During the current tenure, the Secretary General:

- managed the ICOH extra fees re-payment process, coming from the ICOH 2018 Congress;
- organized the ICOH 2022 digital Congress;
- worked with ICOH 2024 organizers for the contract signature through email correspondence and a meeting held in Rome in December 2019;
- carried out preparatory work for the ICOH 2027 bidding process in compliance with the updated Guidelines on Congress Organization.

The COVID-19 pandemic greatly impacted the organization of the ICOH 2022 Congress. The 33rd International Congress on Occupational Health 2022 (ICOH 2022), previously planned to be held in Melbourne, Australia, was postponed to 6–10 February 2022 in a new digital format.

The exceptional circumstances due to the COVID-19 global pandemic made it impossible for the Australian National Organizing Committee to guarantee all the minimum requirements for the organization of the Congress, which are stated in the ICOH Constitution, Bye-Laws and Guidelines on Congress Organization. Consequently, ICOH, after consultation with the Working Group on Congress Organization and the Finance Committee, decided to take the role of Organizer of the ICOH 2022 Congress with the support of the Australian National Organizing Committee as the Co-organizers in order to ensure the celebration of the 33rd International Congress in a virtual format. The Board approved the decision on 29 April 2021 as an exceptional measure due to the persistent difficulties caused by the COVID-19 pandemic.

Throughout the second half of the current term, the Secretariat General, the ICOH Officers, and the National Organizing Committee were strongly committed to organizing the ICOH 2022 digital Congress.

g) Voting procedure and development of the electronic vote system

The introduction of the electronic vote was proposed at the second General Assembly, held in Seoul on 5 June 2015, and the ICOH Secretariat was charged with the task of exploring such a possibility through a deep analysis of regulatory and procedural levels of action. At the regulatory level, in order to introduce the electronic vote, the ICOH General Assembly and the ICOH Board approved the changes to the ICOH Constitution during the ICOH 2018 Congress. The activities carried out during the current term focused on the electronic vote system setup. ELIGO, a professional company with extensive experience in the field of electronic voting, was in charge of the development of the system. In the second half of the current term, the ICOH Secretariat worked jointly with ELIGO to adapt the platform to ICOH's election procedure's specific needs.

As a result of this work, the election process to renew ICOH leadership for the 2022–2024

tenure will be held in electronic format for the first time and on an experimental basis, in conjunction with the ICOH 2022 digital Congress.

h) External and internal communication: ICOH website and database

Internal and external information activities are crucial for any organization. The ICOH website is one of our internal information channels, together with the Newsletter and the information disseminated through our members' scientific publications. It offers constantly updated contents and useful tools in the Virtual Offices (presentations, brochure, and application forms), which the National Secretaries and Scientific Committee Chairs can use at national meetings and Scientific Committee events to promote ICOH membership and activities.

As further development, during the current term, the Secretariat explored the possibility of restyling the ICOH members' database and make it a more modern, user-friendly and well-structured tool. The database is mainly used for recording members' contact information and tracking their payments of the triennial fee. It is a complex tool, which includes several queries to retrieve and compare data and it is linked to the ICOH website, which provides it with the updated information available in the Private Area. The new ICOH database is under development and the ICOH Secretariat is testing its advanced version.

REPORT ON ICOH SCIENTIFIC COMMITTEES

Ms. Claudina Nogueira, Vice President

Message from the Vice-President

The current ICOH Triennium (2018 to 2022) started just after the very successful 32nd International Congress on Occupational Health (ICOH2018) held in Dublin, Ireland, for which we thank and congratulate the Congress President, Dr Martin Hogan, and his congress organizer committees. Little did we know at that time that the current triennium would be extended to four years and that many of the planned events for ICOH and its Scientific Committees, Working Groups and members would have to be indefinitely postponed or cancelled, and that so much of ICOH's work would be done virtually as the 'new normal'.

We live in unprecedented and challenging times. Our world is in turmoil, and the ways in which we live and work have changed forever during the course of the past two years. The COVID-19 pandemic and all its health, economic and social impacts and ramifications have ironically brought the world closer together.



Never before has there been such a united front in collaboration and sharing of lessons learned, knowledge and experience, as we all try to do our bit towards managing and eradicating the pandemic as quickly and effectively as possible.

There are probably very few workers and their families and communities worldwide who can say that they have not been affected by COVID-19. At international, regional and local levels, and across all sectors, organizations have mobilized their resources and skills to develop and/or share all they can about COVID-19 for the benefit of their workers, their families and their communities. These include policies, legislation updates, technical guidance documents, training materials, official statements, risk assessment tools, standard operating procedures, action frameworks, vaccination protocols and mandates, and return-to-work guidelines.

Many organizations have dedicated COVID-19 resources on their websites, and have shared what they have learned though countless virtual information sessions such as webinars, symposia, conferences and workshops.

ICOH has stepped up, as anticipated, and contributed to the ongoing global battle against the pandemic, and I would like to mention some examples.

At the organizational level, an official ICOH statement to highlight the importance of the successful prevention and management of the COVID-19 pandemic at work was submitted

in October 2020 to the Special Session of the World Health Organization (WHO) Executive Board on the implementation of the World Health Assembly Resolution WHA73.1 COVID-19 response. The proposals made in this statement include working towards the wide recognition of work-related COVID-19 cases as occupational disease cases; ensuring access to competent occupational health services for all working people; and paying special attention to the protection of COVID-19 high-risk workers across various sectors.

Also, at the organizational level, ICOH launched a survey on COVID-19, which was administered to ICOH National Secretaries and other senior OSH experts throughout the world. The survey collected information on public health policies, prevention measures, and other policies put in place by the national governments of various countries to contain the global pandemic. The findings will be published through ICOH channels and may be used for analysis and benchmarking at both national and international levels.

At the invitation of the International Labour Organization (ILO), the paper titled 'Work-related injuries and diseases and COVID-19', authored by ICOH leadership, was published in the International Journal of Labour Research and is available online:

Takala J, Iavicoli S, Kang SK, Nogueira C, Gagliardi D, Kocks DD, Rantanen J. Work-related injuries and diseases, and COVID-19. COVID-19 and Recovery: The Role of Trade Unions in Building Forward Better.:27–49.

https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---actrav/documents/ publication/wcms_810045.pdf

Many of ICOH's Scientific Committees have produced outputs on various aspects of COVID-19, a few of which I will mention below:

- 1. The ICOH Scientific Committee on Occupational Health for Health Workers prepared a statement in support of occupational health for health workers. The statement was informed by the events in honour of World Patient Safety Day (WPSD 2020) on 17 September 2020, organized by WHO. The objective of WPSD 2020 was to raise global awareness of the importance of health workers' safety in sustaining a health care system and increasing patient safety.
- 2. The ICOH Scientific Committee on Shiftwork and Working Time contributed to a special issue of the 'Industrial Health' journal, which published a series of consensus papers and good practices on various aspects of shiftwork.
- 3. The ICOH Scientific Committee on Unemployment, Job Insecurity and Health undertook the arduous task of translating the ICOH occupational health guidebook titled 'Creating a safe and healthy workplace: A guide to occupational health and safety for entrepreneurs, owners and managers' into Bahasa Indonesian. The guidebook can be downloaded from the ICOH website in various languages, free of charge. ICOH contributed towards the costs of printing this new translation of the guidebook, for use in Indonesia. I was honoured to be invited by the leadership of the Scientific Committee to deliver the opening message at the virtual launch event on 16 September 2020. The guidebook has been distributed to several universities that collaborate with small-scale industries, workers' unions, the Indonesian entrepreneur association, and other entities, with the ultimate aim of disseminating it as widely as possible, for the maximum benefit of workforces.

Vulnerable workers and COVID-19: Insights from a survey of members of the ICOH' Members 4 of the ICOH Scientific Committee on Unemployment, Job Insecurity and Health conducted a study to determine whether occupational health professionals thought that the COVID-19 pandemic might cause further disadvantage to any particular group(s) of vulnerable workers globally, and if so, which group(s). A cross-sectional study was carried out with a sample of occupational health professionals by means of an online questionnaire which was distributed via e-mail within the ICOH community. The data were collected and analysed in 2020 (165 responses from 52 countries) and the findings were published in early 2021. The survey respondents most often identified workers with job insecurity (i.e., those in precarious employment or in the informal sector) as the disadvantaged groups likely to suffer further detriment due to COVID-19. The authors concluded that occupational health professionals play a key role and have a moral duty to encourage policies that improve social justice and reduce inequalities. The full article can be accessed online: Int. J. Environ. Res. Public Health 2021, 18(1), 346; https://doi.org/10.3390/ijerph18010346

The findings provide information for policy-makers to review present responses to the COVID-19 pandemic for many countries and formulate context-relevant measures to limit the impact in reference to work and employment, because as we are well aware, behind the recorded COVID-19 deaths is a high level of uncertainty, anxiety, and a dreadful loss of livelihoods.

5. Various ICOH Scientific Committees have organized and held online events such as Scientific Committee meetings and webinars, especially during the second part of the triennium. Below are a few examples of webinars with COVID-19 themes:

(i) Rural Health: 'Webinar on COVID-19' (June 2020) – Scientific Committee members and professionals involved in the management of COVID-19, from various countries, shared what they have learned

(ii) Occupational and Environmental Dermatoses: 'Webinar on the current situation pertaining to occupational (hand) eczema due to the COVID-19 pandemic' (April 2021)

(iii) Work Organisation and Psychosocial Factors presented two webinars: 'Working from home in times of COVID-19: Line care in the workplace under COVID-19 in Japan' (April 2021) and 'Psychosocial health risks and policy responses during the COVID-19 pandemic: The case of Taiwan' (September 2021)

(iv) Accident Prevention: 'Healing the scars of the pandemic: Tackling a future of long COVID' (Aug 2021)

6. The ICOH Scientific Committee on Vibration and Noise contributed to position statements about the effectiveness of germicidal ultraviolet irradiation and ozone for the purpose of sanitization in the context of the COVID-19 pandemic. These statements also address the possible risk to human health, particularly when the general public is involved.

- 7. The ICOH Scientific Committee on Women, Health and Work contributed papers to a virtual conference that highlighted issues that put women's health at risk namely, telework (which is remote work), an increase in gender-based violence, and the vulnerability of informal sector workers during the COVID-19 lockdowns and quarantine periods.
- 8. The following ICOH Scientific Committees collaborated with the American Society of Safety Professionals (ASSP) India Chapter and the University of Calcutta to deliver the engaging 9th Professional Development Conference held virtually in April 2021, themed 'Promoting sustainability and social well-being through excellence in OSH': Occupational Health in the Construction Industry; Rural Health: Agriculture, Pesticides and Organic Dusts; Occupational Health in Small-scale Enterprises and the Informal Sector; and Occupational Health and Development. Sub-themes included 'Vision Zero', Digital Technology, Mental Health, Sustainability, and technical sessions were organized by each of the ICOH Scientific Committees. I was invited by the conference organizers to represent the ICOH Officers, co-chair a session and officially launch the book of abstracts. The conference and an excellent compilation of abstracts, especially during such a trying pandemic situation in India where the commitment and passion for OSH and the well-being of workforces continue to be evident.
- 9. '24 Jornadas de Salud Ocupacional', the 24th Annual Conference of the Society of Occupational Medicine of the Province of Buenos Aires (Sociedad de Medicina del Trabajo de la Provincia de Buenos Aires SMTBA), an ICOH Affiliate Member, took place from 2 to 4 December 2020, in a hybrid format (online and in-presence). The theme was 'Challenges and Opportunities of the New Normal' and I was honoured to be invited to deliver the closing keynote titled 'Challenges and opportunities of occupational health in the new normal' which included an overview of occupational infectious diseases, discussed how occupational health has been affected by the COVID-19 pandemic, shared lessons learned from COVID-19 that will impact occupational health, and proposed some ideas on the future of occupational health, post-pandemic.

These are but a handful of examples of the valuable contributions made by ICOH and its Scientific Committees and members to the COVID-19 efforts.

Throughout this very challenging triennium, many of the ICOH Scientific Committees and members have continued their efforts to remain active in research, advocacy, advisory, and service delivery endeavours and to make valuable contributions to global occupational health, even in the face of so many constraints and barriers.

A good example is the contributions that the Scientific Committees have made to the scientific programme of the upcoming 33rd International Congress on Occupational Health (ICOH2022 – Melbourne-Rome Global Digital Congress, 6 to 10 February 2022). Initially planned to be held onsite in Melbourne, Australia, in March 2021, and then postponed for one year, the Congress was eventually transformed into a fully virtual format during the second half of 2021, due to the ongoing global COVID-19 pandemic. ICOH is grateful to its Scientific Committees and members for their valuable contributions and ongoing commitment and dedication to occupational health, and to ensuring the sustainability and continuity of the ICOH Congress

in trying times. More than 1200 participants have registered, and an impressive number (107) of ICOH members in good standing from low- and middle-income countries, whose abstracts were accepted for the Free Paper Sessions, met the eligibility criteria and received registration fee waivers.

I take this opportunity to thank the dedicated teams at ICOH and the various Organizing and Scientific Committees for their unwavering support and assistance during this triennium, and for making the ICOH2022 Congress possible. In particular, I would like to thank:

- i. Colleagues from Monash University in Australia my counterpart Deborah Glass (Co-Chair of the Scientific Programme), Malcolm Sim (ICOH2022 Congress Co-President), and Desmond Gul (Coordinator of the Melbourne Stage), for their valuable contributions to the Scientific Programme,
- ii. Diana Gagliardi (ICOH Deputy Secretary General) and the ICOH Secretariat the 'movers and shakers' for much of the logistics, operational issues, and 'behind-the-scenes' work related to the ICOH2022 Congress,
- iii. Won-Jun Choi Gachon University, Korea (Coordinator of abstract publication for a special issue of SH@W),
- iv. The ICOH Scientific Committees, whose contributions form a large part of the Scientific Programme of the ICOH2022 Congress,
- v. Marilyn Fingerhut and Garrett Burnett NIOSH, USA (ICOH2022 Congress Awards Coordination and Logistics),
- vi. The Triumph registration and technical teams (ICOH2022 Congress Platform and Professional Conference Organizer), and
- vii. The ICOH Officers Jukka Takala (ICOH President and ICOH2022 Congress Co-President), Sergio Iavicoli (ICOH Secretary General and ICOH 2022 Congress Co-President) and Seong-Kyu Kang (ICOH Vice President) – and Marilyn Fingerhut (Immediate Past ICOH Vice President for Scientific Committees), for their advice and support, and for willingly sharing their expertise throughout the triennium.

This has been a triennium of renewed and strengthened collaboration between Scientific Committees. Before the start of the global pandemic, a flagship event demonstrating the best ever collaboration between Scientific Committees was held in Mumbai, India, 28 January to 1 February 2020. This was the 'International Conclave on Occupational Health (OCCUCON 2020)' – a Joint Conference of eight ICOH Scientific Committees, the 70th Annual National Conference 2020 of the Indian Association of Occupational Health (IAOH), and the 68th Annual Conference of the IAOH Mumbai Branch. The following eight Scientific Committees were co-organizers and participants in OCCUCON 2020: Education and Training in Occupational Health; Effectiveness in Occupational Health Services; Rural Health: Agriculture, Pesticides and Organic Dusts; Mining Occupational Safety and Health; Occupational Health in the Construction Industry: Occupational Health and Development: Occupational Health in Small-scale Enterprises and the Informal Sector; and Occupational Health in the Chemical Industry. The hosts and organizers of OCCUCON 2020 and the associated conferences are to be congratulated for a very successful and well-attended event, which was efficiently run. The scientific content of the presentations across the five days was of a very high standard, and the Conclave offered all participants who represented various stakeholders the ideal opportunity to network and update their knowledge on various aspects of occupational

health. Selected abstracts from this collaborative and dynamic event have been published as OCCUCON 2020 proceedings in a special issue of the Indian Journal of Occupational and Environmental Medicine (IJOEM), the official publication of IAOH (Vol. 24, Supplement 4, January 2020).

I was honoured to be invited by the organizers of OCCUCON 2020 and the ICOH Scientific Committee programme within the Conclave to represent the ICOH Officers and to deliver the following presentations: (i) the Worksafe India Oration titled 'Update on occupational health in South Africa' and, (ii) 'The myriad faces of climate change: Lessons for occupational and public health' (with a special focus on developing countries), in the Special Session on Global Warming and Climate Change, organized by the ICOH Scientific Committee on Rural Health: Agriculture, Pesticides and Organic Dusts. May this model of Scientific Committee collaboration become entrenched and continue to be successful in the upcoming new triennium and beyond.

The ICOH Midterm Meeting followed two weeks later, in Rome, Italy (11 to 13 February 2020) at the INAIL headquarters. It was well attended by approximately 50 participants representing ICOH leadership – Officers, Board Members, the Secretariat, and the Scientific Committee Chairs (or Secretaries).

I am particularly grateful to the Scientific Committees that have engaged with me and invited me to participate in their events. I appreciate how they included me in their activities throughout the triennium – I found them to be very enriching experiences and learned valuable lessons.

The 'new normal' ways of living and working that are direct results of the ongoing global COVID-19 pandemic have shown us throughout most of the past two years that never has it been more important to collaborate and share learnings.

As an extended and challenging triennium (2018 to 2022) draws to a close, we reflect on the numerous impacts that the ongoing COVID-19 pandemic has had across the world – globally, regionally, nationally, and locally – over the past almost two years. The way we live and work has changed irreversibly. Many lives and livelihoods have been lost across all sectors, and health services continue to be under tremendous strain.

ICOH looks forward to continued and proactive engagement with its members and Scientific Committees during the new, shorter triennium that is about to start (2022 to 2024), in the interests of improving and sustaining occupational health for all in these ongoing trying times.



'On a clear day you can see forever' – A magnificent view of the centre of ancient Rome from the terraces of the Campidoglio, on the summit of the Capitoline Hill. The half-day conference on 'Future of Work' (organized in conjunction with the ICOH Midterm Meeting in February 2020) was held at the Protomoteca Hall of the Campidoglio.

Photograph – Claudina Nogueira (South Africa)

SUMMARY REPORT ON ICOH SCIENTIFIC COMMITTEES

Introduction

This Final Triennium Report summarizes the key activities of the 37 ICOH Scientific Committees (SCs) during the 2018–2022 triennium (an extended period of four years instead of three, due to the global COVID-19 pandemic).

Each SC prepared a Final Triennial Report, which was posted in the SC 'Reports and Events' section in the 'SC Virtual Office' on the ICOH website.

SCs were requested to include outputs and activities for the reporting period January 2020 to February 2022 in their Final Triennium Reports. SC activities and outputs from the first part of the current triennium, i.e. from May 2018 to December 2019, were reported in the individual SC Midterm Reports submitted for tabling at the ICOH Midterm meeting in Rome, Italy, in February 2020. The composite SC Midterm Report can be accessed in the 'SC Virtual Office' on the ICOH website.

Status and Activities of the Scientific Committees

There are currently 37 SCs in ICOH, some more active than others. The SCs provide scientific support for ICOH and contribute to advancing the health and safety of workers globally. All ICOH members are grateful for their hard work and dedication on behalf of ICOH. Thirty-five SCs provided Final Triennium Reports by 30 December 2021. For the reporting period of January 2020 to February 2022, two SCs did not submit Final Triennium Reports, viz: SC on Occupational Medicine and SC on Work and Vision.

Many SCs have collaborated with other SCs to produce scientific products of a high standard and to organize scientific events such as conferences, symposia, training courses, seminars and webinars. Many SCs have established and/or strengthened their collaborations with non-ICOH organizations at international, regional, and national levels. The vast amount of work that has been carried out by the SCs during the 2018 to 2022 triennium is incorporated into three addenda (available as supplementary documents to this report); the information presented in the different sections was obtained from the individual SC Midterm and Final Reports:

- Addendum 1 'Highlights' Examples of Major Projects, Outputs, and Focus Areas of Scientific Committees (May 2018–February 2022), with a special focus on publications, as many SCs have listed publications of their members as SC outputs. The award for most publications goes to the SC on Cardiology in Occupational Health, whose members published in excess of 70 publications in 2020 and 2021.
- Addendum 2 Summary of conferences of ICOH SCs held during the full triennium (May 2018 to February 2022). For other events such as seminars, workshops, courses, and webinars please refer to the SC Composite Midterm Report (February 2020) and the individual SC Final Triennium Reports (Addendum 3). There has been an increasing trend for various SCs to combine efforts and co-organize/co-host/co-sponsor conferences in various geographical locations. Increasingly, SC conferences are also being held in partnership/collaboration with non-ICOH organizations, e.g. national occupational health associations and universities.

The distinction of 'collaborative event involving the most SCs' goes to the 'International Conclave on Occupational Health (OCCUCON 2020)' – a Joint Conference of eight ICOH SCs, the 70th Annual National Conference 2020 of the Indian Association of Occupational Health (IAOH), and the 68th Annual Conference of the IAOH Mumbai Branch. The following eight SCs were co-organizers and participants in OCCUCON 2020: Education and Training in Occupational Health; Effectiveness in Occupational Health Services; Rural Health: Agriculture, Pesticides and Organic Dusts; Mining Occupational Safety and Health; Occupational Health in the Construction Industry; Occupational Health and Development; Occupational Health in Small-scale Enterprises and the Informal Sector; and Occupational Health in the Chemical Industry.

• Addendum 3 – Final Triennium Reports of individual SCs. The information provided in all the SC Final Triennium Reports is useful for sharing amongst all SCs, as valuable lessons can be learned from each SC's experiences during the reporting period, and various opportunities for potential new collaboration amongst SCs may be more easily identified.

Scientific Committee Virtual Office on the ICOH Website

We are all grateful to the ICOH Secretariat and ICOH Web staff who support the ICOH website at www.icohweb.org. They update the links and SC information on a webspace for each SC on the SC public webpage http://www.icohweb.org/site/scientific-committees.asp

At the top of each SC's webpage, space is provided for a description of the SC, before the listing of the names and contact details of the SC leadership (usually Chair and Secretary, but in some cases also information on SC Steering or Management Group members).

However, only 20 SCs have provided descriptions of their SCs on their webpages, such as aims and objectives, work focus areas and main activities. The remaining SCs are encouraged to submit this information to the ICOH Vice President and the ICOH Secretariat (icoh@inail.it) to be uploaded on their SC webpage.

Among the 37 SCs, 16 also have their own websites, and they provide the links to their SCmanaged websites on the space provided on their ICOH webpage. Having a description of the SC is particularly recommended for all the SCs who do not have their own managed websites.

Currently, 11 SCs have no SC description and no own websites, which means that there is no information available on the work of these SCs, for the benefit of current or new ICOH members who are considering which SCs they would like to join (ICOH members can join a maximum of three SCs).

The ICOH Secretariat and Web staff also develop and maintain the 'Virtual Office for SCs' at http://www.icohweb.org/site/member-corner-scientific-committees-virtual-office.asp.

The 'Virtual Office for SCs' is accessed through the 'Private Area' on the ICOH website, and the SC leadership members need to have a valid username and password for access.

It is important for the SC leadership to access and use the 'Virtual Office for SCs' during their terms of office, as numerous resources required for SC functioning are available on this platform. Examples are reports and official communications from/for ICOH meetings and events, template forms for preparing the SC documents that are requested during the triennium, sponsorship funding forms for SC events, and very importantly, the 'Guidelines for Scientific Committees' which all SC leadership need to be aware of; this document is also available under the 'ICOH Core Documents' section on the public ICOH website. There are also other useful tools in the 'Virtual Office for SCs' which can be used to market ICOH at SC meetings and events, such as presentations on ICOH, the membership brochure, and application forms.

At the top of the 'Virtual Office for SCs' is a link to 'SC Reports and Events', for access to reports and notifications of upcoming SC events, listed per SC. The intention is to provide information for other SCs and to encourage collaborations among SCs.

Midterm Meeting of ICOH Officers, Board Members and Scientific Committee Chairs On 11 to 13 February 2020, the ICOH Midterm Meeting was organized and hosted by the Rome headquarters of the Italian Workers' Compensation Authority (INAIL – Istituto Nazionale Assicurazione contro gli Infortuni sul Lavoro), which houses the ICOH Secretariat. The meeting venue was the INAIL Palazzo at 144 Via IV Novembre in central Rome.

The meeting started with the joint meeting of the ICOH Officers, Board Members and SC Chairs (or Secretaries) and was attended by close to 50 participants. The joint meeting opened with the report from the ICOH President, followed by reports from the two Vice Presidents (for SCs and National Secretaries) and the report from the Secretary General. Professor Malcolm Sim, President of the then ICOH2021 Congress shared updates on the organization of the event; his presentation included a showcase of the Congress venue, the Melbourne Convention and Exhibition Centre.

The meeting participants then broke up into groups for discussion and feedback on three

topics: i) increasing collaboration among SCs, ii) increasing the visibility of SC work and transfer of SC outputs to the ICOH Repository, and iii) optimization of management for SCs. A general discussion on the way forward for SCs followed, emanating from the ideas that emerged. Summary points of the suggestions put forward are listed below:

(i) Increasing collaboration among SCs

- Restructuring of the existing SCs, in particular the need to make the SC offerings more attractive to engage new members
- Drafting of a guideline document on how to develop SC websites
- Using social media to promote SC activities
- Exploring institutional collaboration with national OSH institutes, e.g., for SC events and outputs
- Mutual promotion of SC events among the different SCs and their professional networks, and promotion of joint events
- ICOH to invest in video-conferencing systems which would widen participation, raise awareness, and promote knowledge sharing
- The SCs have much potential which is not fully utilized in the current structure

(ii) Increasing the visibility of SC work and transfer of SC outputs to the ICOH Repository

- The objective should be to make ICOH and the ICOH Repository the 'go-to' place for people looking for information and evidence on occupational health. Visibility should be enhanced in the scientific community, in academia, and in practice.
- Funded research for developing guidelines that will help raise ICOH visibility in the scientific community
- Appointing a scientific curator to whom members can send papers would facilitate the production of consensus papers, and a template needs to be developed for position statements
- Collaboration with high impact journals and special issues should be strengthened so as to facilitate the translation of research carried out by the ICOH SCs into practical applications
- Linking junior and senior members via a mentoring programme should be fostered; mentoring could also facilitate succession planning by including younger members in the ICOH structures
- Although the process defined for the production of official guidelines and position papers is strict (because these outputs express the views of ICOH as an organization), it is time to review and modernize this process but still remain mindful of the stringent rules.
- Although the ICOH Newsletter is well established, it remains a challenge to receive contributions from members. More participation from SCs is required.
- Translation of research into practice needs to be repackaged into a 'hot topic' format for wider reach and uptake, and should not be seen as only official documents for the ICOH Repository.

(iii) Optimization of management for SCs

- Management refers to ways in which to improve not only marketing, communication and visibility, but also the availability of resources (funds, people, and time) to manage websites
- Active participation on social media platforms is a way of attracting young OSH professionals to ICOH; younger members could be engaged in website development and maintenance
- Developing a handbook would facilitate the transition of SC leadership from one Chair to the next and ensure continuity
- Guidelines, e-learning, blogs, and newsletters should be used more proactively to reach practitioners and researchers more effectively
- Relationships with national societies should be fostered, with the support of the National Secretaries
- Some SCs are dormant and do not respond to communications from ICOH; the current SC system must be reorganized, SCs involved in similar work could possibly be merged and some SCs even terminated.

The Midterm Meeting included two ICOH Board Meetings on the second and third days. At the first Board meeting, the final contract between the National Organizing Committee of the ICOH2024 Congress and ICOH was formally signed. Professor Abdeljalil El Kholti, President of the ICOH2024 Congress, presented an update on the congress organization. The 34th ICOH International Congress will be jointly organized by the Moroccan Occupational Health Association (MOHA) and the Faculty of Medicine and Pharmacy of Casablanca, Hassan II University of Casablanca; and will be held in Marrakesh, Morocco with the theme 'Enhancing occupational health practices: Tackling the gap'.

The International Conference on 'Future of Work: Challenges and Opportunities for Occupational Health and Safety' was held by ICOH and the INAIL on the second day, with the patronage of the Municipality of Rome. The half-day conference was held at the magnificent Protomoteca Hall of the Campidoglio, at the Piazza del Campidoglio – a masterpiece of Renaissance architecture, designed by Michelangelo.



Approximately 50 participants attended the ICOH Midterm Meeting, 11–13 February 2020, in Rome, Italy. *Photograph: Courtesy of ICOH Secretariat (Italy)*



The ICOH Midterm Meeting started with the joint meeting of the Officers, **Board Members** and Scientific Committee representatives (Chairs or Secretaries) on Monday, 11 February 2020, at the INAIL headquarters in Rome. Photograph: Claudina Nogueira (South Africa)



Congress Organizers and ICOH Officers – The SASOM-MEDICHEM Joint Congress was held in Johannesburg, South Africa, 31 July–3 August 2019. The Congress hosted the ICOH Officers meeting and the meeting of the ICOH National Secretaries – Africa, as well as the meetings of the MEDICHEM Board and the SASOM ExCo. *Photograph: Laria Botha (South Africa)*



International Commission on Occupational Health



Scientific Committee Contributions to ICOH2022 Congress (www.icoh2022.net)

The 33rd International Congress on Occupational Health (ICOH2022) will be held in a fully digital format, from 6 to 10 February 2022. More than 1200 participants have registered. The Congress was initially planned to be held in Melbourne, Australia, in March 2021, but due to the global COVID-19 pandemic which started in March 2020, bans were imposed on international travel and mass gatherings such as scientific conferences. The Congress was initially postponed for one year, effectively extending the triennium by an extra year, in the hope that an onsite Congress would still be possible. After much deliberation, ICOH leadership and the Australian National Organizing Committee made the difficult decision to transform the Congress into a fully virtual format, with a revised theme that is better aligned with the ongoing global pandemic: 'Sharing Solutions in Occupational Health through and beyond the Pandemic'.

The Congress will be run through a visually rich digital platform, recreating the environment of an in-presence congress. The platform will accommodate all sessions and main events that are traditionally part of the ICOH Congress format, to which the ICOH SCs and Working Groups (WGs) are main contributors. The digital format will ensure wider accessibility, giving the whole OSH community the opportunity to attend; this novel congress approach will be particularly beneficial for participants from low- and middle-income countries. Participants will have 24/7 on-demand access to all sessions and content through the Congress digital platform. The Plenary sessions and the Global Policy Forum will be broadcast live on two stages, taking into account different time zones ('Rome stage' and 'Melbourne stage'). Semi-Plenary sessions will include the opportunity for live discussion at the end of each session, while Special Sessions, and Oral Free Paper and Interactive Poster Sessions will be available on-demand at any time during the Congress and for four months after the Congress dates.

During the triennium, the SCs contributed extensively and enthusiastically to the development of the scientific content of the Congress in various ways:

- SC members recommended plenary and semi-plenary speakers one opening keynote, 11 plenary keynotes, and 24 semi-plenary presentations have been scheduled,
- Most of the Special Sessions (which involve invited speakers and are not peer reviewed) were organized by the majority of the SCs, although some Special Sessions were proposed by non-ICOH organizations,
- SC members peer reviewed abstracts that were submitted to Free Paper Session topics, for oral and poster presentations.

ICOH2022 Congress proceedings – Accepted abstracts for both Special Sessions and Free Paper Sessions (oral and poster presentations) will be published in an online supplement of

'Safety and Health at Work' (SH@W), one of the key international journals in its field and part of the Elsevier Group.

Special Sessions

Due to the space and time constraints associated with transforming an onsite Congress to a fully digital format, the number of Special Sessions had to be reduced, from around 85 to a final number of 56 (224 abstracts), following the withdrawal of two sessions in November and December 2021.

The Congress Organizers endeavoured to grant at least one Special Session to all SCs that submitted proposals, and preference was given to Special Sessions organized collaboratively by more than one SC and/or WG and/or other entity.

Details of the 56 accepted Special Sessions are listed in Table 1, below.

Table 1. Special Sessions, ICOH2022 Congress

COLLABORATIVE SPECIAL SESSIONS CO-ORGANIZED BY ICOH SCS, WGS AND OTHER ENTITIES **TOPIC / PROPOSERS** SPECIAL SESSION TITLE Education and Training in Occupational Health + Occupational Health in Small-scale Enterprises and SS 05 - Development of Basic Occupational Health the Informal Sector + Family Physicians Special Services, more needed than ever Interest Group for Workers' Health (WONCA) + Indian Association of Occupational Health (IAOH) Education and Training in Occupational Health + ICOH SS 06 - Great opportunities of online sources on Communication and Information Task Group education and information SS 08 - From the chemical massive disaster to the Emergency Preparedness and Response in Occupational Health + Occupational Toxicology prevention SS 13 – Preventing TB and lung disease with silica dust Mining Occupational Safety and Health + Industrial controls: The case for primary prevention Hygiene Musculoskeletal SS14 - Preventing and managing occupational shoulder Disorders + Effectiveness in **Occupational Health Services** disorders Occupational and Environmental Dermatoses + SS 18 - Strategies to address the increasing burden of Radiation and Work occupational skin cancer Occupational Health for Health Workers + Women, SS 20 - The other pandemic: Mental health issues Health and Work facing health workers during the COVID-19 crisis Respiratory Disorders + Emergency Preparedness and SS 28 - Occupational health in disaster management, Response in Occupational Health response, research, and preparedness Rural Health: Agriculture, Pesticides and Organic Dusts SS 29 – Pesticide issues with a focus on Glyphosate + Collegium Ramazzini Occupational Health in Small-scale Enterprises and the SS 32 - Migrant workers' health: Solutions to empower Informal Sector + Migrant Health and Development and inspire change **Research** Initiative Respiratory Disorders + Occupational Health in Small-SS 33 - Preventing occupational respiratory diseases in scale Enterprises and the Informal Sector SMEs: Sharing solutions from silicosis experiences SS 39 - Effect of blue light on workers and on LED Work and Vision screen computerized instrument users SS 40 - Engaging workplaces in mental illness-related Work Disability Prevention and Integration disability prevention

Work Organisation and Psychosocial Factors	SS 41 – Policy approaches to psychosocial risks at work		
Shiftwork and Working Time + Work Organisation and Psychosocial Factors	SS 42 – Recovering from work – what to do (and not to do) during off-job times		
European Union of Medical Specialists (UEMS) + Education and Training in Occupational Health	SS 44 – European Postgraduate Assessment in Occupational Medicine		
SPECIAL SESSIONS ORGANIZED BY SINGLE ICOH SCS, WGS AND OTHER ENTITIES			
TOPIC / PROPOSERS	SPECIAL SESSION TITLE		
Accident Prevention	SS 01 - Occupational health and safety implications for the post-pandemic workplace		
Ageing and Work	SS 02 – Working towards a healthy longer working life		
Allergy and Immunotoxicology	SS 03 – Immunotoxicology in workplaces: Prevention, early detection, and treatment		
Cardiology in Occupational Health	SS 04 – Stress, sleep, cardiovascular autonomic disorders, and health promotion		
Effectiveness in Occupational Health Services	SS 07 – Occupational Health Services for all		
Indoor Air Quality and Health	SS 10 – Indoor air quality in modern office buildings		
Industrial Hygiene	SS 11 – Respirable crystalline silica: Exposure limits, measurements and control measures		
Mining Occupational Safety and Health	SS 12 – Mining occupational safety and health		
Nanomaterial Workers' Health	SS 15 – Occupational safety and health strategies for engineered nanomaterials: A model for emerging technologies		
Neurotoxicology and Psychophysiology	SS 16 – Pesticide exposure: Understanding pathways of exposure and health outcomes to develop interventions to reduce exposure and improve safety		
Occupational and Environmental Dermatoses	SS 17 – Is dermatitis the most frequent occupational disease? Epidemiology and prevention		
Occupational Health and Development	SS 19 – Sharing solutions in Occupational Health: Best practices from LMICs		
Occupational Health for Health Workers	SS 21 – Updates on protections against infectious agents in healthcare		
Occupational Health in the Chemical Industry	SS 22 – Responsible care and corporate citizenship		
Occupational Health in the Construction Industry	SS 23 - Occupational Health in the Construction Industry		
Occupational Health Nursing	SS 24 – The work of an occupational health nurse in various countries during COVID-19		
Occupational Toxicology	SS 25 – Benzene: Towards a lowering of occupational limit values and its impact on risk assessment and biomonitoring		
Radiation and Work	SS 26 – Prevention of electromagnetic fields exposure risk in the workplace and the issues of the workers at particular risk		
Reproductive Hazards in the Workplace	SS 27 – Reproductive hazards in the workplace and environment		

Rural Health: Agriculture, Pesticides and Organic Dusts	SS 30 – Effects of pesticides and dusts	
Shiftwork and Working Time	SS 31 – Recovery from shiftwork: Approaches and experience	
Thermal Factors	SS 34 – Climate change, workplace heat, and occupational health and productivity	
Toxicology of Metals	SS 35 – Emerging conditions of metal exposure: Implications for occupational risk assessment and management strategies	
Unemployment, Job Insecurity and Health	SS 36 – Unemployment, job insecurity and health for vulnerable workers pre-, during and post-pandemic	
Vibration and Noise	SS 37 - Noise and ototoxicant exposure-induced hearing loss: Surveillance, epidemiology, and prevention	
Women, Health and Work	SS 38 – New realities for the health of working women in the new normal	
ICOH Board Member	SS 46 – Best practices of training experts in occupational health	
ICOH Past President	SS 47 – New challenges to professional ethics in occupational health	
ICOH Working Group on Demographic Changes and Occupational Health	SS 52 – Young workers: Our future workforce needs OSH attention now!	
ICOH Working Group on the Future of Decent Work	SS 53 – Critical issues in the future of decent work	
ICOH Working Group on Occupational Infectious Agents	SS 54: Biorisk management in the workplace: Beyond the tick box	

SPECIAL SESSIONS ORGANIZED BY NON-ICOH ENTITIES

TOPIC / PROPOSERS	SPECIAL SESSION TITLE	
Asian Ban Asbestos Network (ABAN) + Japan Occupational Safety and Health Resource Center	SS 43 – Elimination of asbestos-related diseases in Asia Pacific	
Child Labour in Agriculture, Food and Agriculture Organization of the United Nations (FAO)	SS 45 – Supporting a breakthrough against child labour and hazardous work in agriculture	
International Collaboration/Consortium on OHS in Fishing, Aquaculture and Seafood Processing	SS 48 – Aquaculture occupational health and safety: Towards preventive approaches	
International Occupational Medicine Society Collaborative (IOMSC)	SS 49 – The Occupational Medicine Pipeline: Developing occupational medicine expertise internationally	
Nordic Future of Work and OSH Group	SS 50 – Occupational safety and health challenges and solutions in the post-pandemic future of work	
Partnership for European Research on Occupational Safety and Health (PEROSH)	SS 51 – Pandemic and post-pandemic challenges: A vision of the PEROSH network	
Workplace Health Without Borders (WHWB - International)	SS 56 – Workplace Health Without Borders (International): How the collaborative work of an international occupational health charity changes the face of occupational health around the globe	
World Health Organization (WHO)	SS 57 – Systematic reviews and meta-analyses on exposure to long working hours for the WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury	

Free Paper Abstract Sessions

The number of Free Paper Sessions was also reduced to 38 – the topics were merely the names of the SCs, plus an extra topic: 'Occupational Health and COVID-19', which became the most subscribed topic for Free Paper Sessions (oral and poster presentations), having received the lion's share of abstract submissions, as anticipated by the Congress Organizers.

Over 900 abstracts were received for Free Paper Sessions (oral and poster presentations). Most topics were granted only one oral session, and topics which received very few or no abstract submissions were merged into combined sessions – either oral or poster, or both. A few very popular topics were allocated two oral sessions each, and the most popular topic, 'Occupational Health and COVID-19' was allocated three oral sessions. All the abstracts were peer reviewed by the respective SCs and their allocated reviewers. The list of Free Paper topics is below.

- Accident Prevention
- Aging and Work
- Allergy and Immunotoxicology
- Cardiology in Occupational Health
- Education and Training in Occupational Health
- Effectiveness in Occupational Health
 Services
- Emergency Preparedness and Response in Occupational Health
- Epidemiology in Occupational Health (two oral sessions)
- History of Prevention of Occupational and Environmental Diseases
- Indoor Air Quality and Health
- Industrial Hygiene
- Mining Occupational Safety and Health
- Musculoskeletal Disorders (two oral sessions)
- Nanomaterial Workers' Health
- Neurotoxicology and Psychophysiology
- Occupational and Environmental
 Dermatoses
- Occupational Health and COVID-19 (three oral sessions)
- Occupational Health Nursing
- Occupational Medicine

- Occupational Toxicology
- Occupational Health and Development
- Occupational Health for Health Workers – (two oral sessions)
- Occupational Health in the Chemical Industry
- Occupational Health in the Construction Industry
- Radiation and Work
- Reproductive Hazards in the Workplace
- Respiratory Disorders
- Rural Health: Agriculture, Pesticides and Organic Dusts
- Shiftwork and Working Time
- Occupational Health in Small-scale Enterprises and the Informal Sector
- Thermal Factors
- Toxicology of Metals
- Unemployment, Job Insecurity and Health
- Vibration and Noise
- Women Health and Work
- Work and Vision
- Work Disability Prevention and Integration
- Work Organization and Psychosocial Factors – (two oral sessions)

Other highlights of the scientific programme include:

- An active programme will focus on early- and mid-career delegates, including a prize for the best student poster and the ILO Master Fellowship Award,
- The ICOH2022 Student Poster Competition will be chaired by Dr Marilyn Fingerhut (Immediate Past ICOH Vice President), assisted by Garrett Burnett of NIOSH,

- An opportunity for Congress participants to vote for the best poster of the Congress and a special recognition will be given to the winner.
- Delegates from low- and middle-income countries who are ICOH members in good standing and whose abstracts submitted to Free Paper topics (for oral or poster presentations) were accepted, were able to apply for a grant to support their participation. A total of 107 ICOH members in good standing from low- and middle-income countries met the eligibility criteria and received registration fee waivers.
- The Global Policy Forum will convene high level experts from various regions and WHO and ILO leadership, to build on the lessons learned from the present global health emergency, and discuss relevant strategies and practices for providing a new global reference point for occupational health and safety policies addressing preparedness and management of pandemic events, well beyond COVID-19.

Conclusion

Throughout this very challenging triennium, many of the ICOH SCs and their members have continued their efforts to remain active in research, advocacy, advisory, and service delivery endeavours, and to make valuable contributions to global occupational health, even in the face of so many constraints and barriers.

Many SCs switched to online platforms to hold virtual meetings, conferences. seminars, and webinars. The SCs collaborated to hold joint events and contributed to the upcoming ICOH2022 Congress in various ways. Over the triennium. the ongoing perseverance of the SCs and their members have ensured that valuable outputs have arisen from collaborative their work with other SCs, as well as non-ICOH organizations, such as WHO and ILO, e.g. the publication of scientific book chapters, papers, position statements, survey findings, and technical notes; the drafting of conference declarations; the development of handbooks and guidelines; the translation of guidance books; and presentations at many conferences.



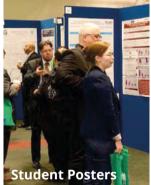
OCCUCON 2020 was held at the Nehru Centre in Mumbai, India, and attended by more than 200 delegates, representing 25 countries across six continents. *Photograph: Courtesy of IAOH and OCCUCON 2020 organizers* (India)



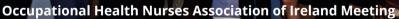
















REPORT ON ACTIVITIES OF ICOH NATIONAL/AREA SECRETARIES

Dr Seong-Kyu Kang, Vice President

1. Appointments of National/ Area Secretaries by the President

A Business Meeting of the ICOH National/Area Secretaries (NSs) was held on 3 April 2018 in Dublin, comprising 61 participants.

Outgoing NS (2 terms served)	16
Active NS (1 term served)	19
New NS candidates	23
Observers	3
Total	61



Six outgoing and three incoming NSs were unable to attend the meeting.

The NSs actively participated in the Congress and the Business Meeting for NSs. Close to three quarters of the NSs (73%, 41 of 56) participated in both, but fewer than 40% of general members participated in the Congress. The members' participation rate of the Dublin Congress was higher than that of the previous Congress (less than 25%), perhaps due to geographical reasons.

All Officers attended the NS meeting. The Vice President presented the activities of NSs of the previous term and the election process of new NSs for the 2018–2020 Triennium. He also explained the role and activities required of the NSs. As all ICOH Officers tend to attend both the NS meeting and the meeting of the Chairs of the Scientific Committees (SCs), these two meetings need to be synchronized in terms of both time and facilities (meeting room for 100 people), to enable more fruitful networking for both groups.

In order to facilitate the appointments by the newly elected President after the Congress, the Vice President sent an email to the 56 NSs asking them to complete the election process ahead of the Dublin Congress.

The message also contained

- the Guidelines for ICOH National/Area Secretaries
- the Contact Information Form of the elected NS
- the Transparency Declaration Form of the elected NS.

The tasks of the ICOH NSs are defined in the Guidelines as follows:

- To represent the activities of ICOH in the country or area to which they are designated
- To promote cooperation and communication among the ICOH members of their country or area
- To promote the links to other ICOH bodies in their country/area.

A total of 26 NSs were not eligible to serve additional terms, and thus had to elect a new NS candidate. The 30 NSs in their first term were eligible for re-election. They were requested to either go on to the re-election process or to bring a consensus of members for their reappointment. This process started six months ahead of the end of the previous term. Countries/Areas with more than 16 members in good standing were generally asked to go through the process of nomination and election. Countries/Areas with fewer than 16 members were asked to obtain an agreement from the members in good standing. The Vice President also emailed all members in the countries with no NSs or in which the NSs were not active in the election process.

Before this triennium began in April 2018, 45 countries/areas elected an NS candidate, and 19 NSs were re-elected or obtained an agreement for serving one more term from the members of their countries. In the countries/areas in which the NSs had served two terms, or which had no NSs, 26 NSs became newly elected candidates.

At the Business Meeting in Dublin, some countries claimed the candidates of NSs for their representativeness. These were NSs who were to serve a second term. The Vice President asked all members in their country/area to elect candidates again in accordance with the ICOH guidelines. The Vice President directly managed the election process himself in some countries/areas. Four original NS candidates were replaced by newly elected ones. Two of the newly elected NSs were very active and contributed to increasing ICOH membership in their countries. Unfortunately, it seems that the other two were not very active.

The candidates' documents (the Contact Form and the Transparency Declaration Form) were ready before the new triennium began. Those who paid the membership at/immediately after the Congress were officially appointed by the newly elected President in June 2018. Of these 39 NSs, 22 were new and 16 had served in the previous triennium. The President had appointed 61 NSs by the end of 2018, another seven in 2019 and two in 2020.

As of December 2021, 70 NSs had been officially appointed for tenure from 2018 to 2020: 44 new Secretaries, 24 reappointed and 3 reappointed after skipping a term in the course of 2018–2021. Of the 44 newly appointed NSs, 29 are in countries/areas that have new NSs, and 15 are in countries/areas that had no NSs in the 2015–2018 Triennium. Having more NSs than in the previous triennium is a good achievement.

The list of NSs is attached as Annex 1 to this report.

Many of the difficulties that had arisen in the appointment process in the previous triennium were resolved. However, some problems still remain:

- 1. Candidates' delayed submission
- 2. Candidates not being in good standing: Delayed membership payment in the new triennium.
- 3. Lack of willingness to recommend or elect a successor in some countries/areas
- 4. Nominees not being in an active or representative occupational health role in some countries/areas.

	2012-2014	2015-2017	2018-2020	
Regions	Appointed	Appointed	Appointed	Newly appointed
North and Central America	3	2	6	5
South America	10	9	9	6
Europe	23	21	27	15
Middle East	3	1	3	3
Africa	10	9	12	6
Asia	8	11	11	8
Oceania	1	2	2	1
Total	58	56	70	44

The NSs are distributed among the continents as follows:

As of 31.12.2021

ICOH lost NSs in Nepal, Canada, and Estonia, but recruited NSs in Belarus, Costa Rica, Czech Republic, Ecuador, France, the Republic of North Macedonia, Greece, Guatemala, Iran, Israel, Jamaica, Luxembourg, Malaysia, Poland, Saudi Arabia, Togo, and Turkey. The total number of countries/areas in which NSs have been appointed over the two triennia from 2015 to 2021 is 74.

Dr Saou-Hsing Liou was appointed as Secretary for Taiwan, China on 6 June 2018. However, he passed away unexpectedly. He was succeeded by Professor How-Ran Guo.

The term of the NSs in the 2018–2021 Triennium was extended to 2022 as the ICOH Congress was postponed due to the COVID-19 outbreak.

At the end of the triennium in 2021, the NSs election in each country is in progress. NSs have been asked to report the results of the election before the end of 2021. The request was

emailed to the NSs in Western and Northern Europe in September 2021. Forty-four NSs are eligible for re-election, but four of these have announced they are stepping down from the position due to personal reasons. The Vice President communicated with the NSs in Africa, Asia, South America, Central America, North America, and Eastern Europe through online meetings.

2. Work Plan for ICOH NSs

The tasks of all the ICOH NSs are in principle the same as they have been in previous triennia, although there are differences between countries/areas with more than 100 ICOH members and countries/areas with only one or a few members.

2.1 Developing a work plan

Generating and maintaining contacts with National Societies/Associations in Occupational Health.

- Setting a target for increasing membership in the country
 - ICOH Core Documents and ICOH Promotion tools
 - ICOH administrative support (President, two Vice Presidents, Secretary General, the Secretariat)
- Participating in the NSs' meetings in the region (to be informed by the Vice President)

Feedback from the NSs was active compared to that in the previous triennia. In some countries/areas such as India, Indonesia, Peru, the Philippines, the Russian Federation, and Turkey, newly appointed NSs have been very active, building a network within/between the countries/areas and recruiting new members. However, after their appointment, some NSs have not been very active. It seems that some of them have not even carried out the main occupational health activities in their countries/areas. Moreover, some have also not used the NS Virtual Office of the ICOH website. All the ICOH NSs should be reminded of the Virtual Office, which makes it easier for them to carry out their tasks.

2.2 Evaluation of activities

• Report to the Vice President of activities during the triennium.

The NSs are obligated to report back twice during the triennium on their activities in their countries. The reports of the NSs have improved since the previous triennia because of the close relationship between the NSs and the Vice President. The summary of the activity reports for 2018–2020 will be presented to the Board and the General Assembly in February 2022.

The NSs have contributed to the ICOH membership campaigns. Many have made a special effort to promote ICOH and recruit new ICOH members, particularly at the annual conference of the occupational health association/society of their country. Some NSs created a significant increase in new members. The NSs who reached more than a 10% increase in membership will be acknowledged during the forthcoming General Assembly.

2.3 Request to National/Area Secretaries

In accordance with the work plan, the NSs have been asked to

- I. Periodically log in to the ICOH website Private Area. Only the NSs can access the members' list of their countries/areas.
- II. Download the ICOH presentation file from the Virtual Office and use it to recruit new members at meetings and conferences of the occupational health society or association in their country.
- III. Report their activities as ICOH NSs at the end of the year (or at least once during 2019 for the Mid-term Meeting and once in 2021 for the General Assembly of the 33rd ICOH Congress). The reporting form is available from the Virtual Office on the website.
- IV. Write a short article (fewer than 250 words) about ICOH activities in their country for the ICOH Newsletter.
- V. Make a plan to have or join the Regional Meeting in their continent (online meetings were held in special circumstances).
- VI. Be actively involved as a member of the organizing committee of International Conferences held by SCs in their country (event information is also available on the ICOH website).
- VII. Promote ICOH activities at national or regional conferences by inviting ICOH Officers to the conferences.

3. Increasing membership of ICOH

The role of NSs in membership campaigns is crucial. Many have succeeded in increasing membership in their countries/areas.

3.1 Setting a membership target in 2018

Some NSs have described challenges and difficulties in recruiting new ICOH members. Some of these challenges can be facilitated by measures by the Vice President or ICOH Secretariat, but others need to be tackled by the NSs themselves. ICOH Officers have visited several countries to promote the membership campaign. For example, the President attended the national occupational health conference in Nigeria to give an address on ICOH activities in 2019. The Vice President attended national conferences on occupational health (medicine) of the Russian Federation and the Philippines to promote ICOH activities in 2019.

A year after the Dublin Congress, the Secretariat started a membership renewal campaign and asked the NSs to join in. The NSs can obtain information from the Private Area of the website (www.icohweb.org), and are the only ones who can access the member list of their country. They can find members in good standing (GS) and those who are not in good standing (NGS) and download the membership list.

Payment Rule: There was some confusion about the membership renewal payment. The Vice President sent detailed information to the NSs as follows:

To renew membership, members who did not pay the fee in the past triennium should pay fees for two triennia. If they are not willing to pay the previous

membership, they have to re-apply for membership. This means that they have to go through the application process again. If someone is joining for the first time, the membership fee will be divided by three years and the payable fee will be decided on the basis of years remaining. Once they have membership, they should pay all the fees for the next triennium. This is why total fees are different for members who did not pay for the previous triennium.

3.2 Information on SC events and symposia in the country

The NSs would appreciate being informed of all ICOH scientific symposia and meetings held in their respective countries. This would allow them to prepare an ICOH stand for relevant meetings to attract new members.

Information on most of the symposia held by the ICOH SCs is available on the ICOH website or in the Newsletter. However, the information on these media is always too late for the NSs to participate actively in these events. Direct communication of this information from the SCs to the NS should be improved.

The organizers of all the SCs' symposia and meetings are encouraged to collaborate with the relevant NSs on a session on ICOH activities to promote ICOH and recruit new members.

3.3 Annual Congresses of National OH Societies and Associations

Every NS should try to promote ICOH at one annual congress of the national society of occupational medicine (or respective organization) during their three-year term. According to the NS reports, this seems to be the most common form of membership recruitment. Many NSs, such as those in Indonesia, India, Peru, the Philippines, Nigeria, the Russian Federation gave a presentation of ICOH and recruited new members through their national occupational health conferences.

3.4 Collaboration with National OH Societies and Associations

ICOH NSs should collaborate with the national associations in their countries/areas in order to draw in new members from them – thereby also acquiring new sustaining members. Some of the ICOH NSs are also the present or past presidents of national occupational health associations, which provides an excellent opportunity to attract new ICOH members.

3.5 ICOH promotion materials

The NSs' Virtual Office (http://www.icohweb.org/site/member-corner-national-secretariesvirtual-office.asp) and the ICOH website (www.icohweb.org) are excellent sources of information on ICOH and tools for promoting ICOH activities. The ICOH Secretariat designs and edits the ICOH webpages, and the Secretary General is Editor-in-Chief of the ICOH website.

The Virtual Office and the ICOH website contain the main materials for the NSs to use to inform occupational health and safety experts of ICOH activities, and thereby encourage

them to join ICOH. These are:

- 1. ICOH PowerPoint Presentation
- 2. ICOH in a nutshell
- 3. Memo for NSs
- 4. Membership brochure
- 5. Membership application form (in English, French, Portuguese, Spanish and Italian)

The following documents are also available from the Virtual Office:

- NS obligations: Contact Form, Transparency Declaration Form and NS Report Model for 2018–2020.
- Guidelines for National/Area Secretaries

The member list is only available to NSs for their own country/area.

In addition to these, the Triennial Reports of ICOH and the ICOH Newsletters are also accessible online.

3.6 Communication with the ICOH Secretariat

The NSs emphasize the importance of quick, smooth communication with the ICOH Secretariat in cases when experts wish to join ICOH, to speed up the process from application to decision.

- 1. During the Officers' meeting in Johannesburg in 2019, ICOH Officers discussed rewards for NSs for their activities. Board members and the Chairs of the SCs (SC) are awarded a plaque at the closing ceremony of the Congress when they successfully finish TWO terms of service. The Officers reached consensus that NSs who have shown significant achievement during the triennium should be acknowledged at the Congress.
- 2. A complaint has been made that NSs are not invited to the ICOH Mid-term Meeting. Due to a limited budget, this is unlikely to change at the moment. However, the possibility of inviting regional representatives of NSs or the NSs of countries/areas with a large group of members may be discussed in the future.
- 3. In the Latin American Regional Meeting held in Brasilia, Brazil in 2019, the following requests were made:
 - I. The ICOH budget should allocate resources for the Regional Meetings of the National/Area Secretaries. (It was written as Latin American, but means all Regional Meetings)
 - It is very difficult to squeeze the budget without finding another funding source. Regional Meetings are usually held in conjunction with ICOH SC Conferences. The registration fee for NSs is usually waived by courtesy of local organizers.
 - With minimal financial burden, one solution could be to invite a regional representative to the ICOH Mid-term Meeting if they have a Regional Meeting beforehand.

- II. A new SC should be established within ICOH related to physicians' workrelated diseases and to combat violence against physicians.
 - This is an important emerging issue, and should be dealt with by the SC of Health Workers.
- III. ICOH may send a request to the government of Chile and Paraguay to officiate occupational medicine as a medical specialty in their country as it is not yet recognized.
 - The Vice President for the NSs contacted both countries. Paraguay has already authorized occupational medicine as a specialty of medicine.
 - ICOH will consider sending an official letter to the government of Chile when the NS for Chile drafts a description of the situation in Chile.
- IV. ICOH should make Spanish its third official language.
 - This is a long-standing issue because many new members in Latin America can only speak Spanish.
 - Due to financial reasons, the official language for ICOH events is usually limited to English. French, which is an official language, is not frequently adopted at events.
 - Nonetheless, ICOH has continuously recommended that local organizers provide more languages at the Congress, at least at the Plenary Sessions, such as at the 2015 Seoul Congress, which provided simultaneous interpretation into Spanish. However, members are sure to understand that simultaneous interpretation into languages other than English is costly in many countries and a major financial burden to organizers.
- 4. Several questions were also raised in the African Regional Meeting, held in Johannesburg, South Africa in 2019:
 - I. ICOH membership fee payment problem
 - Paying the membership fee by credit card in Africa is problematic. The solution would be to pay by Paypal, which is easy to do in most countries/areas. Group payment by an NS or someone else would prevent individuals having to approach a bank for a foreign transfer.
 - II. Endorsement for membership application
 - The endorser must be in good standing. However, in many cases, applicants do not know whether they are or not. If the endorser is not in good standing, the application process may be delayed. In order to avoid this situation, ICOH Officers are happy to be a substitute endorser for the applicant if the NS in the country endorses the applicant and others are not available.
 - III. Notification of Good Standing to NSs
 - NSs request information on the good standing of members in their

country when the fee payment is fixed. It would be good if, when the payment is complete, the notification went through to the NS of the country. The ICOH Secretariat will explore this possibility with the webmaster.

- IV. Sustaining Member Campaign
 - ICOH runs a sustaining membership campaign. The membership fee for sustaining members also belongs to the category of GNI ppp. Thus, Officers encourage NSs to promote this campaign to national or public institutes in their country if they exist.
- V. Survey through NSs
 - The results of a survey conducted through the NSs will be published for all members in the near future. The Vice President for the NSs has requested a survey. The request is limited to the case of ICOHrelated matters or ICOH Officers or Chairs of SCs, and the Board. The request related to personal research interests will not be distributed to the NSs.
- VI. Noro Fund application
 - The Noro Fund is still available to those who are not able to pay the membership fee. The eligibility and application process can be found on the ICOH website.
- VII. ICOH2021 Congress and ICOH 2022 Virtual Congress
 - NSs were requested to plan to participate in the ICOH2021 Congress to be held in Melbourne, March 22–27, Australia. However, the NSs raised the issue of high travel costs to Congresses usually held outside of Africa.
 - The Vice President explained that the ICOH NSs from low- and middle-income countries might be given a grant if they meet the following criteria 1) accepted abstract, 2) no previous receipt of ICOH financial support, 3) long ICOH membership period, 4) young scientists, as in previous Congresses.
 - After the postponement of the Congress, it may be easier for members to participate because the virtual event does not involve high international travel costs.
 - The organizer plans to support members from low- and middleincome countries as usual in this virtual Congress.
 - Since the 2009 bidding for the 2015 venue, the bidder promised to donate approximately EUR 65,000 to the fund supporting members from low- and middle-income countries. The Newsletter-editing organization, KOSHA, has also donated approximately EUR 35,000 to the fund from the 2012 Congress to 2018 Congress.
- 5. Election
 - Election of NSs for the next triennium (2022–2024)

- Before the next Congress (February 6, 2022), the NSs should elect or nominate the NSs who will serve in the next triennium. Twentyseven NSs have served their second term and must elect a new NS. Forty-four NSs have only served their first term and may be re-elected or re-appointed by agreement of the members in the country. Four of these announced their resignation from the second term and successors were elected.
- NSs are requested to elect or re-elect NSs by the end of 2021. According to the amendment to the Guideline for National Secretaries, the ICOH President may nominate a new NS before the Congress if they fail to elect one by the due date, to ensure smooth administrative progress of the coming triennium.
- Some countries had already re-elected or nominated NSs for the next triennium as of November 2021.

4. Further developing multidirectional communication

4.1 VP Information Letters and NS Activity Reports

The continuous flow of information among the NSs and ICOH Officers has already been established during the previous triennia. Each year, the Vice President has sent a letter to the NSs to keep them informed and updated.

4.2 Information from NSs in ICOH Newsletter

The NSs were asked to report on their activities in the ICOH Newsletter in a similar manner to the SC Chairs and Secretaries. However, the first half of this triennium did not witness such active NSs participation as that in the previous triennium. Despite many reports from the NSs in the middle of the triennium, unfortunately, the number of reports decreased in the late triennium due to restrictions to normal working life caused by COVID-19 in many countries.

This has been implemented as follows:

Issue	Pages	News from NS
2/2018	17–20	2 (Romania, Japan)
3/2018	17	1 (Egypt)
1/2019	12–19	3 (Romania, Brazil, India)
2/2019	24–27	7 (Malaysia, Togo, the Philippines, Latin America, Bulgaria, France, Spain)
3/2019	13–19	3 (South Africa, Jamaica, the Czech Republic)
1/2020	11–19	2 (India, Jamaica)
3/2020	12	1 (Ireland)
1/2021	10	1 (Argentina)

4.3 ICOH presentation tool

ICOH provides 1) a Powerpoint presentation 2) ICOH in a nutshell, and 3) the Memo for NSs to help them promote ICOH to professionals in their countries/areas. ICOH in a nutshell consists of one slide in a file, but it contains multi slides showing ICOH's history, structure, activities, and membership application process. The Memo for NSs shows the guideline for the activities required of NSs.

4.4 Regional Meeting with ICOH Officers as a communication tool

The Regional Meeting is a good place for ICOH Officers and NSs to meet. When ICOH Officers need to have a physical meeting, this can be held in place of a Regional Meeting, as in Johannesburg, South Africa in 2019. This was a good opportunity for the NSs in Africa to discuss ICOH activities and occupational health with ICOH Officers. In the 2015–2018 Triennium, the Officers' meeting was held in Guatemala during the Latin American Occupational Health Congress (ALSO).

4.5 Developing communication with Scientific Committees

It seems that NSs do not always fully recognize the international conferences and meetings organized by the SC in their countries/areas, which are usually announced on the ICOH website and the Newsletter. The way in which NSs, Chairs and SC Secretaries communicate should be improved.

4.6 Developing communication among National/Area Secretaries

Developing communication among NSs in a region is important. Some continents have their own network, but others do not. It will be the Vice President's task to encourage NSs to form a close-knit group in the region.

4.7 Nomination of speakers for the Congress

When the Vice President for the SCs was collecting nominations for plenary and semi-plenary speakers from the SC Chairs and Board Members, the Vice President for the NSs also asked the NSs for theirs. Many NSs responded and recommended good potential speakers. These were uploaded onto the organizer's website.

As the Melbourne Congress has been modified into the Rome-Melbourne Virtual Congress, the number of plenary speakers has decreased. However, some semi-plenary speakers were selected on the NSs' recommendations.

4.8 Information on prevention of COVID-19

When COVID-19 spread around the world, there was little information on what to do and how to do it at the workplace. Except for China, the Republic of Korea was the first country to experience the outbreak of COVID-19. Korea has quickly adapted after COVID-19 and effectively controlled it on the basis of its experience with the MERS outbreak in 2015. The Vice President distributed a COVID-19 guideline for the workplace to the NSs in March 2020.

The British Institute of Occupational Medicine also provided informative information and links, which were directly forwarded to the NSs for their reference.

5. Joint meetings of National/Area Secretaries

During the triennium, a minimum of one ICOH NS Regional Meeting in each continent is planned in connection with an international conference to be held by one of the countries in the Region.

Dublin, Ireland

A meeting with the ICOH NSs was held during the 2018 ICOH Congress in Dublin to discuss their activities during the previous term and to preliminarily plan activities for the 2018–2020 Triennium. The meeting gathered a total of 61 participants, who agreed to strengthen the membership campaign and actively promote ICOH and its activities in their countries/areas.

2018-2020

During 2018–2020, the Officers planned meetings with the NSs on separate occasions to discuss the membership campaign and the promotion of ICOH activities. Regional Meetings were held in Africa, Latin America in 2019, but no Regional Meetings were held in Asia in 2020 due to COVID-19. The Vice President held online meetings for the NSs in each region in 2021.

Regional Meetings

- The African Regional Meeting of NSs was held in connection with the SASOM and MEDICHEM joint conferences, on 3 August 2019 in Johannesburg, South Africa. Six African NSs joined the Regional Meeting: from South Africa, Nigeria, Kenya, Zimbabwe, Mali, and Togo.
- The Latin American Regional Meeting of NSs was held on 16 May 2019, in Brasilia, Brazil. Seven Latin American NSs joined the Regional Meeting: from Brazil, Uruguay, Peru, Mexico, Chile, Argentina, and Costa Rica. The next meeting was planned to be held in Costa Rica, ALSO in 2020.
- The Asian Regional Meeting of NSs was planned to be held in connection with the 23rd Asian Congress on Occupational Health (ACOH), scheduled for 27–29 May in Daegu, Republic of Korea. However, after one year's postponement, this was cancelled. Finally, the 24th ACOH was rescheduled to be held in Korea in 2023.
- The European Regional Meeting of NSs can be held in connection with SCs' international conferences, which are frequently held in the European region.

Online NS Meeting

- In the third week of September 2021, the Vice President held an online meeting for NSs by region to discuss the ICOH2022 Congress and election of NSs for the 2022–2024 Triennium. These were successful meetings for communication between the VP and the NSs. Many NSs participated in this online meeting despite such short notice. In these meetings, we were able to find other opportunities for the Officers and NSs to communicate in the future.
- Some NSs could not attend the online meeting because they contracted COVID-19, and some were even hospitalized. However, they have now all recovered.

- Asia The online Regional • Meeting in Asia was held on 13 September 2021. A total of six of the 11 NSs and four ICOH Board members participated in the online Regional Meeting in Asia: Ashish Mishra (India). Nuri Purwito (Indonesia), Toru Yoshikawa (Japan), Victor Hoe (Malaysia), Margaret Leachon (the Philippines), and Kathawoot Deepreecha (Thailand). The board members who participated in the meeting were Seichi Horie (Japan), Eun-A Kim (Korea), Shyam Pingle (India) and Sunil Kumar Joshi (Nepal).
- South America The . online meeting in South America was held on September 14 2021. Six of the nine NSs participated: Claudia De Hoyos (Argentina), Rosylane Rocha (Brazil), Marta Cabrera (Chile), Maria Alpuin (Uruguay), Yohama Caraballo (Venezuela) and Aquiles Monroy (Peru).





 Africa - The online meeting in Africa was held on 14 September 2021. Four of the 11 NSs took part: Kibor Keittany (Kenya), Birama Diallo (Mali), Mame Faye (Senegal) and Silvere Kevi (Togo).



Middle East . and Mediterranean -The online meeting in the Middle East and Mediterranean was held on 17 September 2021. Three NSs of the four participated: Amani Waheed (Egypt), Merdi Jahangiri (Iran) and Marwan Behisi (Saudi Arabia).



Eastern Europe - The . online meeting in Eastern Europe was held on 14 September 2021. Three of the ten NSs participated: Carmen Busneag (Romania), lelena Djokovic (Serbia), and Ihar Siamionau (Belarus) on behalf of Tatsiana Rybina. Some NSs who could not attend the online meeting due to other commitments requested a brief summary of the meeting from the Vice President.



6. NSs' Activity Report

Most NSs actively promote ICOH to their occupational health society. Here are some examples of their activities.

The Philippines

Dr Margaret L. Leachon is a first-term NS for the Philippines.

She reported having presented ICOH during the national occupational health conference, which was the 41st Annual PCOM (Philippines College of Occupational Medicine) Convention on 22 March 2019. Vice President Professor Kang was invited and gave a lecture including the topic of ICOH and ICOH activities. In the 22nd Midvear Virtual Convention on 5-9 October 2021, all sessions focused on infectious diseases, including COVID-19.ICOH information was announced on the landing page, during virtual breaks and at virtual booths.



Peru

Dr Aquiles Monroe is a first-term NS for Peru.

Dr Monroe reported that the pandemic had had a negative impact on ICOH activity in Peru. As everywhere else in the world, labour systems have been modified, and ICOH members have undergone changes and suffered job losses among other things. However, they have tried as much as possible to keep ICOH going strong and to inform Peruvian members of ICOH activities, always encouraging the registration of new members and the renewal of membership among those already registered. They have represented ICOH in Peru in many face-to-face academic activities, but since 2020, all activities have been held virtually.

One of the problems in Peru when renewing membership is payment, as it is highly complicated to pay in Swiss Francs in Peruvian banks. In 2018, the Peruvians asked for a dollar account to be opened for payments, but apparently this was not viable.

At the 6th Peruvian Congress of Occupational Health in 2019 in Arequipa, the Sociedad Peruana de Salud Ocupacional SOPESO and ICOH members expressed interest in applying to be the venue of the ICOH 2027 Congress. However, due to the pandemic, the final decision has not yet been made.

Finally, Dr Monroe mentioned that participation in the NSs meeting in Brazil was very informative for him and thanked the host, Rosylane Rocha. They use WhatsApp group chatting for communicating with each other in Latin America.

Nigeria

Uche Enumah is a first-term NS for Nigeria.

Uche Enumah reported on the ICOH Regional Meeting, which was held during the National Conference of Occupational Health Society in Nigeria. The President of ICOH, Dr Jukka Takala, was invited to attend the Nigerian National OH Society Annual Conference on 8–10 November 2018 as a Special Guest of Honour and to deliver a keynote address. Uche Enumah used this opportunity to get the President to chair an ICOH African Regional Meeting, attended by 53 old, new and intending members who then signed on as members immediately after the meeting. He also led a team, including the President of ICOH, to speak on a local (National) Radio station and answer questions about ICOH and occupational health development in the country.

Although face-to-face meetings have been cancelled, he has made continuous efforts to improve communication among members, including using the WhatsApp application. Seventy-six active participants joined the platform for interaction and knowledge sharing.

Efforts to reach new members and reawaken the awareness of old members are ongoing. However, inability to make direct payments for registration is a recurring challenge.

He also tried to encourage two national institutes to become ICOH Sustaining members, but unfortunately was not successful.



REPORT OF THE ICOH NEWSLETTER

Dr. Eun-A Kim, Editor in Chief

The Newsletter aims to provide information on members and their activities through ICOH communities such as the Scientific Committees (SC), national gatherings and regional meetings. It comprises a president's message, editor's note, a special article on hot topics, reports from SCs and National Secretaries (NS), information on the chairs and secretaries of the SCs and on the NSs, and any information related to members. A French translation is also provided in the latter part of the Newsletter. The electronic version is then uploaded to the ICOH website immediately after publishing.





In 2019, when the COVID-19 pandemic began, nine articles were submitted to the ICOH newsletter to help members and other professionals working to fight the COVID-19 infection. These articles encouraged researchers and workers to continue their important, difficult work after the COVID-19 pandemic.

The Hot Topic section comprised twenty articles on current topical issues such as occupational infections, indoor air quality, open-access policy, occupational health insurance, OH education, and women's health.

The most important point on which the editors focused their activities was communication among members through the reports of the SCs, NSs and affiliated members. A total of 15 SCs and 13 NSs contributed to the ICOH Newsletter with upcoming news and activity reports. Eight NSs submitted news on their national occupational health situations.

The ICOH Newsletter needs more input from members for international communication.

Volume(n)	Title & Authors
	Open access publishing is showing responsibility, Frank van Dijk et al.
2018 (1)	INDOOR AIR QUALITY AND HEALTH Consensus Document, Dr Paolo Carrer et al.
	Occupational Infectious Agents: Guidelines for Travellers, Dr Robert R. Orford
	Sustainability of Health Insurances and Technical Claim Management, Dr Guilherme Augusto Murta
2018 (2)	Basic Regulatory System of Occupational Health in China, Dr Min ZHANG
	Powerful Women's Hands, Dr Igor Bello et al.
2010 (2)	Fifteen-year experience on occupational health protection for healthcare workers in China, Dr Min ZHANG
2018 (3)	1.5 billion vulnerable workers and the role of OH professionals, Dr. Jacques Tamin et al.

Hot topic list

Neglecting Workplace Culture could be costing the UK Economy Billions Annually, Dr Minha Rajput-Ray
COVID 19: Occupational Health, Dr Nick Pahl
Poor Air Quality Impacts Staff Comfort and Productivity, Dr Janice Green
Sleep and the workplace – SOM round table, Dr Nick Pahl
Occupational health for health workers in China before and after COVID-19, Dr Min Zhang
Occupational Health Community Perceptions: Impact of COVID-19 on Work and Employment, Dr Ebuenyi ID et al.
Perspectives and cautions in using ozone as air and surface disinfectant in the conjuncture of SARS-CoV-2 pandemic, Dr Elena Grignani et al.
Perspectives and cautions in the use of germicidal UV radiation in the conjuncture of SARS-CoV-2 pandemic, Dr Francesco Frigerio et al.
What should Occupational Health Professionals know about Mental Health and COVID-19? Prof. Neil Greenburg
Women workers and COVID-19: Looking at 4 issues that put their health at risk, Dr I. Bello
A short contribution asking attention for a recent systematic review: Education of agricultural workers improving safety and health literacy, Dr Frank van Dijk et al.
Consensus document: ICOH SCIENTIFIC COMMITTEE: INDOOR AIR QUALITY AND HEALTH, Dr Peder Wolkoff

Contributions from SCs and NSs

Scientific Committees	National Secretaries
Effectiveness in Occupational Health Services (EOHS) Toxicology of Metals Work Organization and Psychosocial Factors (WOPS) Education and Training in Occupational Health (ETOH) Occupational Health in Small Scale Enterprises and Informal Sector (SCOHSSEIS) Occupational and Environmental Dermatoses Radiation and Work MinOSH Cardiology in Occupational Health Rural Health Construction Industry Occupational Health for Health Workers (SCOHHW) Job Insecurity and Health (UJIH) Occupational Health and Development Musculoskeletal disorders (MSD)	Chile Romania India Malaysia Togo The Philippines Brazil Bulgaria France Spain Jamaica Czech Republic Paraguay Ireland

Since December 2015, I have been with you as the Editor-in-Chief of the ICOH Newsletter. Publishing 19 newsletters, I have come to know the trends of occupational health around the world, as well as the activities, active support and responses of ICOH members.

I was so excited every time I witnessed how the intense activities of the National Secretaries and the creative meetings of the Scientific Committees were able to reach ICOH members through the newsletter. In particular, the memory of so many members voluntarily gathering information, in small and big amounts, to help each other while overcoming the COVID-19 crisis impressed me greatly and still touches my heart. Today, along with ICOH as an organization, the ICOH Newsletter also faces a new challenge and another change. As times and missions are changing, the goals and format of the newsletter will also have to evolve. To achieve this, the ICOH Newsletter will require editors with a fresh perspective.

With this number, I step down from my role as Editor-in-Chief of the Newsletter, and return to being one of its contributors. I would like to express my heartfelt appreciation to our colleagues and members who have helped publish the Newsletters over the last six years.



INDEPENDENT AUDITOR'S REPORT

Financial Statements as at 09/30/2021

Prot. FCR - RC006672018BD3633





Report on the audit of the financial statements

To the General Assembly of the International Commission on Occupational Health

INDEPENDENT AUDITOR'S REPORT

Opinion

We have audited the financial statements of the International Commission on Occupational Health (the Commission), which comprise the balance sheet as September 30, 2021, the income statement and the cash flow statement for the financial period from November 1, 2017 to September 30, 2021 and the explanatory notes.

In our opinion, the financial statements give a true and fair view of the financial position of the Commission as at September 30, 2021, and of the result of its operations and its cash flows for the financial period then ended in accordance with the International Financial Reporting Standards as adopted by the European Union.

Basis of opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of this report. We are independent of the Commission in accordance with ethical requirements and standards applicable in Italy that are relevant to the audit of financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other matters

This report is not issued pursuant to the law, given the fact that laws and regulations applicable to the Commission do not require a statutory audit.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with the International Financial Reporting Standards as adopted by the European Union and, within the limits of the law, for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Commission's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Commission or to cease operations, or has no realistic alternative but to do so.

Bari, Bergamo, Bologna, Brescia, Cagliari, Firenze, Genova, Milano, Napoli, Padova, Palermo, Roma, Torino, Verona

BDO Italia S. p.A. - Secke Legale: Viale Abruzzi, 94 - 20131 Milano - Capitale Sociale Euro 1.000.000 i.v. Codice Fiscale, Partita IVA e Registro Imprese di Milano n. 07722780%7 - R.E.A. Milano 1977842 Iscritta al Registro dei Revisori Legati al n. 167711 con D.M. dei 15/03/2013 G.U. n. 26 dei 02/04/2013 BDO Italia S.p.A., società per azioni italiana, è membro di BDO International Limited, società di diritto inglese (company limited by guarantee), e fa parte della rete internazionale BDO. network di società indicententi.



Those charged with governance are responsible for overseeing the Commission's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISA Italia) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of the audit in accordance with International Standards on Auditing (ISA Italia), we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risk of material misstatement of the financial statements, whether due to fraud or error; design and perform audit procedures in response to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of non detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control;
- Obtain and understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control;
- Evaluate the appropriateness of accounting principles used and the reasonableness of accounting estimates and related disclosures made management;
- Conclude on the appropriateness of management's use of the going concern and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Commission's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Commission to cease to continue as a going concern;
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions in a manner that achieves fair presentation.

We communicate with those charged with governance, identified at the appropriate level as required by the ISA Italia, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Rome, January 10, 2022

BDO Italia S.p Fabio Carlini Partner

STATEMENT OF FINANCIAL POSITION September 30, 2021

ASSETS		Notes	September 30, 2021 (CHF)	October 31, 2017 (CHF)
Current Assets: Cash and cash equivalents Other receivables Total Assets		4 5 -	774.576 	683.715 1.818 685.533
LIABILITIES AND FUND BALANCES				
Current liabilities: Other payables Deferred revenue Total current liabilities		6	243.556 243.556	111.181 1111.181
Fund balances: Accumulated Funds Total fund balances		7	531.019 531.019	574.353 574.353
Total liabilities and fund balances		:	774.576	685.533
ACCUMULATED FUNDS	2021		2017	
Balance as at prior period ending Period adjustment - Other receivables depreciation Transfer from statement of income and expenditure -	574.353 651 - 42.683		- 1.886	
Balance as at current period ending	531.019		574.353	

STATEMENT OF INCOME AND EXPENDITURE Period from November 1, 2017 to September 30, 2021

	November 1, 2017 to May 4, 2018 (CHF)	May 5, 2018 to September 30, 2021 (CHF)	November 1, 2017 to September 30, 2021 (CHF)	December 1, 2014 to October 31, 2017 (CHF)	November 1, 2011 to November 30, 2014 (CHF)
INCOME	()	()	()	()	()
Membership fèes	21.504	379.044	400.548	386.255	402.700
Miscellaneous income	-	9.126	9.126	13.712	9.150
Bank interest	-	3	3	·	9.975
Income from ICOH 2018 Income from ICOH 2015	-	123.855	123.855	-	-
Income from ICOH 2015 Income from ICOH 2012	-	-	-	111.234	92.201
Foreign exchanges profit	-	- 9	- 9	1.108	2.669
Total Income	21,504	512.037	533.541	512.309	516.695
				0121005	
EXPENDITURE					
Past President's expenses	-	690	690	1.611	5.009
Current President's expenses	3.119	34.389	37.508	40.848	29.747
1st Vice President's expenses	1.799	12.378	14.177	24.656	8.869
2nd Vice President's expenses	-	7.153	7.153	10.931	27.070
Current Secretary-General's expenses	2.357	23.893	26.250	29.151	23.306
Secretariat office administration expenses	11.324	19.991	31.315	51.862	43.447
Secretariat admin. staff salary	15.869	105.149	121.018	112.737	102.844
Board meetings expenses	-	7.629	7.629	12.117	6.056
Officers' meeting	-	16.542		14.237 29.030	12.413
Scientific committees expenses SCs Meetings of chairpersons/secretaries	1.000	16.542 8.076	17.542 8.076	29.030	29.419 13.169
ICOH Stategic Initiatives	4.199	24.477	28.676	74.028	54,183
Audit fees	4.199	13.229	13.229	15.093	23.559
Bank charges and taxes	1.319	8.126	9.445	17.436	19.015
ICOH 2012 Congress	1.515	5.120	7.44J	17.450	23.596
ICOH 2015 Congress	_			26 573	-
ICOH 2018 Congress	22.018	-	22.018	20.070	
ICOH 2022 Virtual Congress	-	199.218	199.218		
Website account	3.306	17.630	20.936	20.746	25.265
Foreign exchanges loss	344	6.176	6.520		
Printing expenses	-	4.824	4.824	21.479	13.668
Total expenditure	66.654	509.570	576.224	514.195	460.635
OPERATING GAIN/(DEFICIT) TRANSFERRED	- 45.150	2.467	- 42.683	- 1.886	56.060
TO ACCUMULATED FUNDS					

See accompanying notes to the financial statements.

CASH FLOWS STATEMENT September 30, 2021

	Notes	November 1, 2017 to September 30, 2021 (CHF)	December 1, 2014 to October 31, 2017 (CHF)
CASH FLOWS FROM OPERATING ACTIVITIES			
Loss for the period: Finance costs recognised in profit or loss Net foreign exchange gain/loss		- 42.683 9.442 6.167 - 27.074	17.436
Movements in working capital: Increase/Decrease in trade and other receivables Increase/Decrease in trade and other payables Decrease in deferred revenue		1.818 132.376	- 13.225 - 66
Cash generated from operations		107.120	1.151
Interest paid Other changes in accumulated funds Net foreign exchange gain Net cash generated by operating activities		- 9.442 - 650 - 6.167 - 90.861	1.108
CASH FLOWS FROM INVESTING ACTIVITIES		-	-
CASH FLOWS FROM FINANCING ACTIVITIES		-	
NET INCREASE/DECREASE IN CASH AND CASH EQUIVALENTS		90.861	- 15.177
CASH AND CASH EQUIVALENTS AT THE BEGINNING OF THE PERIOD		683.715	698.892
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD		774.576	683.715



NOTES TO THE FINANCIAL STATEMENTS September 30, 2021

1. GENERAL

The organization was founded in 1906 in Milan (Italy) as the Permanent Commission on Occupational Health. The principal place of operation of the organization is at INAIL, Research Area, Department of Occupational and Environmental Medicine, Epidemiology and Hygiene, Via Fontana Candida 1, 00078 Monteporzio Catone, Rome-Italy.

The principal activity of the organization is to foster the scientific progress, knowledge and development of occupational health and related subjects on international basis.

The functional currency of the organization is the Swiss Franc; therefore, all figures in the financial statements are expressed in Swiss Francs.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF ACCOUNTING – The financial statements are prepared in accordance with the historical cost convention and are drawn up in accordance with the provisions of the International Financial Reporting Standards.

FINANCIAL ASSETS – Financial assets include cash and bank balances and other receivables. Other receivables are stated at their nominal values as reduced by appropriate allowances for estimated irrecoverable amounts.

FINANCIAL LIABILITIES – Financial liabilities are classified according to the substance of the contractual arrangements entered into. Financial liabilities include other creditors and are stated at their nominal values.

FOREIGN CURRENCY TRANSACTIONS – Transactions in foreign currencies are recorded in Swiss Francs at the rates ruling at the date of the transactions. At each balance sheet date, recorded foreign currency monetary balances are reported at the rates ruling at the balance sheet date. All realized and unrealized exchange adjustment gains and losses are dealt with in the income statement.

INTEREST ON FIXED DEPOSITS – Interest on fixed deposits is recognized on an accrual basis.

MEMBERSHIP SUBSCRIPTIONS – Membership subscriptions are recognized on a cash basis.

RETIREMENT BENEFIT COSTS – Payments to defined contribution retirement benefit plans (including state-managed retirement benefit schemes) are charged as an expense when incurred (as stated below, the organization has currently no employees).

3. FINANCIAL RISKS AND MANAGEMENT

i) <u>Credit risk</u>

The organization has minimal credit risk as most of the organization's income are on cash terms.

ii) Interest rate risk

The organization is not exposed to any interest risk except for certain cash balances, which are interest bearing.

iii) Foreign currency risk

The organization's foreign currency exposures arise mainly from the fluctuations in the exchange rate for the Euro and the Swiss Franc, which is also the organization's reporting currency. The organization's management believes that their foreign exchange rate risk is minimal. Hence, the organization does not use any derivative financial instruments to mitigate this risk.

iv) Liquidity risk

The organization has sufficient liquidity at all times through efficient cash management. The organization's ability to meet its obligations is managed by maintaining appropriate level of cash balances.

v) Fair value of financial assets and financial liabilities

The carrying amounts of financial assets and financial liabilities reported in the balance sheet approximate their fair value.

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The carrying amounts of financial assets and financial liabilities reported in the balance sheet approximate their fair value.

4. CASH AND CASH EQUIVALENTS		
	<u>2021</u> CHF	<u>2017</u> CHF
Time deposits	-	-
Cash and bank	774.576	683.715
	774.576	683.715
5. OTHER RECEIVABLES		
	<u>2021</u> CHF	<u>2017</u> CHF
Others	0	<u> </u>
6. OTHER PAYABLES		
0. OTHER TATABLES	<u>2021</u> CHF	<u>2017</u> CHF
Accrued expenses	230.327	98.181
Audit fees payable	13.229 243.556	<u> 13.000</u> <u> 111.181</u>
7. ACCUMULATED FUNDS		
	<u>2021</u> CHF	<u>2017</u> CHF
Balance as at prior period ending	574.353	576.239
Period adjustment Other receivables depreciation	- 651	-
Transfer from statement of income and expenditure	- 42.683	- 1.886
Balance as at current period ending	531.019	574.353
8. STAFF COSTS		
	<u>2021</u> CHF	<u>2017</u> CHF
Staff costs		
Costs of defined contribution plans included in staff costs		

Number of employees at end of the period

-

-

9. RECLASSIFICATIONS AND COMPARATIVE FIGURES

Financial statements for the period 2017-2021 cover the financial period from November 1st, 2017 to September 30th, 2021. The financial statements for the period 2014-2017 cover the financial period from December 1st, 2014 to October 31st, 2017.

The current financial period is referred to approximately four years instead of the usual three years, following the postponement of the 2021 ICOH Congress to the year 2022 due to the COVID-19 pandemic.

Prior period's financial statements classification has been kept for comparability with the current period's financial statements. The figures related to the period ending on September 30th, 2021 are split for the Statement of Income and Expenditure purposes in two columns, referred to the period November 1, 2017 to May 4, 2018 and to the period May 5, 2018 to September 30, 2021, to provide separate evidence of the incomes and expenditures pertaining to current and prior management respectively.





PRESIDENT Dr. Jukka Takala Lintumiemennokka 33 FI- 33680 TAMPERE Finland Tel: +358 33600321 Email: ICOHPresident@inail.it

VICE PRESIDENT

Prof. Seong -Kyu Kang Former Vice President of KOSHA Dept of Occupational and Environmental Medicine Gachon University Gil Medical Center 21 Namdong-daero 774beon-gil, Namdong-gu Incheon 21565 Rep of Korea Tel: +82-32.460-3790 Fax: +82-32.460-3790 Fax: +82-32.460-3999

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SECRETARY-GENERAL

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PAST PRESIDENT Dr. Kazutaka Kogi (Japan)

MEMBERS OF THE BOARD

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INFO

Website: <u>www.icohweb.org</u> Email: icoh@inail.it International Commission on Occupational Health - ICOH Commission Internationale de la Santé au Travail - CIST

Founded in 1906 as Permanent Commission



TO BDO Italia S.p.A. Via Ludovisi, 16 00187 ROMA

Monte Porzio Catone, January 10, 2022

This representation letter is provided in connection with your audit of the financial statements of ICOH - INTERNATIONAL COMMISSION ON OCCUPATIONAL HEALTH for the financial period ended May 4, 2018 for the purpose of expressing an opinion as to whether the financial statements give a true and fair view, in accordance with International Financial Reporting Standards.

We confirm that, to the best of our knowledge and belief, having made such inquiries as we considered necessary for the purpose of appropriately informing ourselves:

Financial Statements

• We have fulfilled our responsibilities, as set out in the terms of the audit engagement, for the preparation of the financial statements in accordance with International Financial Reporting Standards; in particular the financial statements give a true and fair view in accordance therewith.

• The methods, the data, and the significant assumptions used in making accounting estimates and their related disclosures are appropriate to achieve recognition, measurement or disclosure that is reasonable in the context of the applicable financial reporting framework.

• Related party relationships and transactions have been appropriately accounted for and disclosed in accordance with the requirements of International Financial Reporting Standards.

• All events subsequent to the date of the financial statements and for which International Financial Reporting Standards require adjustment or disclosure have been adjusted or disclosed.

There are no uncorrected misstatements.

Information Provided

We have provided you with:

• Access to all information of which we are aware that is relevant to the preparation of the financial statements, such as records, documentation and other matters;



International Commission on Occupational Health - ICOH Commission Internationale de la Santé au Travail - CIST

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 \circ $\;$ Additional information that you have requested from us for the purpose of the audit; and

 $\circ\,$ Unrestricted access to persons within the entity from whom you determined it necessary to obtain audit evidence.

• All transactions have been recorded in the accounting records and are reflected in the financial statements.

• We have disclosed to you the results of our assessment of the risk that the financial statements may be materially misstated as a result of fraud.

• We have disclosed to you all information in relation to fraud or suspected fraud that we are aware of and that affects the entity and involves:

Management;

Employees who have significant roles in internal control; or

 $\circ~$ Others where the fraud could have a material effect on the financial statements. (ISA 240)

• We have disclosed to you all information in relation to allegations of fraud, or suspected fraud, affecting the entity's financial statements communicated by employees, former employees, analysts, regulators or others.

 We have disclosed to you all known instances of non-compliance or suspected non-compliance with laws and regulations whose effects should be considered when preparing financial statements.

• We have disclosed to you the identity of the entity's related parties and all the related party relationships and transactions of which we are aware.

With our best regards

Dr. Jukka Takala, ICOH President

for fini

Prof. Sergio Iavicoli¹, ICOH Secretary-General

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Ms. Claudina Nogueira South African Society of Occupational Medicine (SASOM) P. O. Box 32 Silverton 0127 South Africa Tel: +278 29266205 Email: claudinanogueira@hotmail.com

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PAST PRESIDENT Dr. Kazutaka Kogi (Japan)

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¹ Responsible for the financial statements referred to the financial period ended May 4, 2018, subject to audit.



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Founded in 1906 as Permanent Commission



TO BDO Italia S.p.A. Via Ludovisi, 16 00187 ROMA

Monte Porzio Catone, January 10, 2022

This representation letter is provided in connection with your audit of the financial statements of ICOH - INTERNATIONAL COMMISSION ON OCCUPATIONAL HEALTH for the financial period ended September 30, 2021 for the purpose of expressing an opinion as to whether the financial statements give a true and fair view, in accordance with International Financial Reporting Standards.

We confirm that, to the best of our knowledge and belief, having made such inquiries as we considered necessary for the purpose of appropriately informing ourselves:

Financial Statements

• We have fulfilled our responsibilities, as set out in the terms of the audit engagement, for the preparation of the financial statements in accordance with International Financial Reporting Standards; in particular the financial statements give a true and fair view in accordance therewith.

• The methods, the data, and the significant assumptions used in making accounting estimates and their related disclosures are appropriate to achieve recognition, measurement or disclosure that is reasonable in the context of the applicable financial reporting framework.

• Related party relationships and transactions have been appropriately accounted for and disclosed in accordance with the requirements of International Financial Reporting Standards.

• All events subsequent to the date of the financial statements and for which International Financial Reporting Standards require adjustment or disclosure have been adjusted or disclosed.

There are no uncorrected misstatements.

Information Provided

We have provided you with:

• Access to all information of which we are aware that is relevant to the preparation of the financial statements, such as records, documentation and other matters;



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\circ $\;$ Additional information that you have requested from us for the purpose of the audit; and

 $\circ\,$ Unrestricted access to persons within the entity from whom you determined it necessary to obtain audit evidence.

• All transactions have been recorded in the accounting records and are reflected in the financial statements.

• We have disclosed to you the results of our assessment of the risk that the financial statements may be materially misstated as a result of fraud.

• We have disclosed to you all information in relation to fraud or suspected fraud that we are aware of and that affects the entity and involves:

Management;

o Employees who have significant roles in internal control; or

 $\circ~$ Others where the fraud could have a material effect on the financial statements. (ISA 240)

• We have disclosed to you all information in relation to allegations of fraud, or suspected fraud, affecting the entity's financial statements communicated by employees, former employees, analysts, regulators or others.

• We have disclosed to you all known instances of non-compliance or suspected non-compliance with laws and regulations whose effects should be considered when preparing financial statements.

• We have disclosed to you the identity of the entity's related parties and all the related party relationships and transactions of which we are aware.

With our best regards

Dr. Jukka Takala, ICOH President

for fini

Prof. Sergio Iavicoli1, ICOH Secretary-General

anos

Dr. Diana Gagliardi², ICOH Acting Secretary-General

PRESIDENT

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¹ Responsible for the financial issues as stated in the ICOH Bye-Law 5, Section 3, until August 5, 2021.

² Responsible for the financial issues as stated in the ICOH Bye-Law 5, Section 3, starting from August 6, 2021.

Sustaining Members

Organization	Country
Fundacentro	Brazil
Croatian Institute for Health Protection and Safety at Work – CIHPSW (HZZZSR)	Croatia
National Research Centre for the Working Envi- ronment - NRCWE	Denmark
Finnish Institute of Occupational Health - FIOH	Finland
The Finnish Work Environment Fund	Finland
Bundesanstalt für Arbeitsschutz und Arbeitsmedizin - BAuA	Germany
Fondazione Salvatore Maugeri	Italy
Italian Workers' Compensation Authority - INAIL	Italy
Occupational Health Promotion Foundation	Japan
University of Occupational and Environmental Health	Japan
Korea Occupational Safety and Health Agency - KOSHA	Republic of Korea
Workplace Safety and Health Institute	Singapore
PREVENT - Management and Labour Improving Work Environment	Sweden
International SOS Foundation	The Netherlands
Kundiiev Institute of Occupational Health	Ukraine
International Institute of Risk and Safety Management - IIRSM	United Kingdom
Institution of Occupational Safety and Health - IOSH	United Kingdom
National Institute for Occupational Safety and Health - NIOSH	USA

Affiliate Members

Organization	Country
Sociedad de Medicina del Trabajo de la Provincia de Buenos Aires	Argentina
Australian and New Zealand Society of Occupational Medicine	Australia
National Association of Occupational Medicine of Brazil (ANAMT)	Brazil
Société Française de Médecine du Travail	France
MEDICHEM	Germany
Asociaciòn de Medicina del Trabajo de Guatemala - ASOMET	Guatemala
Indian Association of Occupational Health - IAOH	India
Faculty of Occupational Medicine of the RCPI	Ireland
Occupational Health Nurses Association for Ireland - OHNAI	Ireland
Associazione Italiana di Radioprotezione Medica (AIRM)	Italy
Italian Society of Occupational Medicine - SIML	Italy
Jamaica OHS Professionals Association – JOHSPA	Jamaica
Japan Society for Occupational Health	Japan
Malaysian Society of Occupational Health Doctors - MSOHD	Malaysia
Federaciòn Nacional de Salud en el Trabajo - FENASTAC	Mexico
Philippine College of Occupational Medicine - PCOM	Philippines
Sociedade Portuguesa de Medicina do Trabalho	Portugal
Korean Society of Occupational and Environmental Medicine	Republic of Korea

South African Society of Occupational Medicine - SASOM	South Africa
Asociaciòn de Especialistas en Enfermeria del Trabajo - AET	Spain
Associaciòn Española de Especialistas en Medicina del Trabajo - AEEMT	Spain
Associaciò Catalana de Salut Laboral	Spain
The Society of Occupational Medicine	United Kingdom
International Occupational Hygiene Association – IOHA	USA
American College of Occupational and Environmental Medicine	USA

