The 20th World Congress on Disaster and Emergency Medicine endorsed the WADEM Position Statement on Disaster and Climate change.

This statement was drafted and submitted by the WADEM Oceania Chapter who are cognisant of the particular threat that climate change poses to population health and livelihood in the region.

Many small island states in Oceania are vulnerable to sea level rise and drought. Sea level rise at almost three times the global average has been reported in the Solomon Islands, five reef islands reported as lost to rising sea levels and erosion, and Nuatambu Island has lost greater than half of its habitable area¹.

Kiribati, a country of 33 coral atolls, is expected to begin climate migration in 2020². Rising sea levels, increasing frequency and intensity of tropical storms and acidification of ocean water are expected to make parts of the nation uninhabitable. As a consequence, the government bought land from its neighbour Fiji in 2014 to provide a home for climate migrants.

Nevertheless, many of these countries continue to produce world leading efforts in recognising and planning for the impacts on climate change. The Marshall Islands were the first nation to ratify the Kigali Amendment to curb the use of hydrofluorocarbons, and New Zealand has been recognised by the International Energy Agency for their success in renewable and smart energy systems. As the incoming president for COP23 the Fijian prime minister has recognised green finance and climate resilience as amongst the countries top priorities.

The WADEM position statement is a timely reminder of the increasing effect of climate change on disaster risk and impact, recognises climate change as an issue of global concern and can be accessed at the following link: https://wadem.org/about/position-statements/


(Joe Cuthbertson was the lead on producing this statement)
April equals the start of Cyclone Season in the South Pacific. We have so far (late April) had ‘Debbie’ kicking off with the usual winds and flooding on Australia’s east coast and spreading inland. Flood damage and silted land were clearly visible from the air above the MacKay area late May. It will take some time for this damage to be fixed.

The Australians so kindly sent it to New Zealand to cause more flooding and damage. Some areas received a month’s rain in a single day. In New Zealand, the small town of Edgecumbe in the North Island, had to be completely evacuated as a river broke its banks. Many houses there were totally destroyed or so badly damaged they will need to be demolished.

‘Debbie’ was followed a week later by ‘Cook’, which started in Vanuatu and tracked south, dumping heavy rain in saturated parts of New Zealand. Incidentally, Vanuatu suffered major cyclone damage in 2015 at this time of year.

Both storms again isolated the South Island East Coast town of Kaikoura which is still reeling from a major earthquake in November 2016. The rain caused slips and flooding on the only two roads functioning to the south of Kaikoura, delaying the rebuild process yet again. The road north will be closed for clearing for many months yet. I had travelled the southern coastal road a week earlier and it was obvious that repairs to this road, even to get it to a pre-earthquake state, will take some years. One advantage of having to stop at the many single lane road works was the opportunity to see a whale cavorting and spouting just off shore and a pod of around 30 dolphins frolicking in another spot.

Recent research on this earthquake has found that the peak ground acceleration during this earthquake was the equivalent of 3 x the force of gravity, making it one of the highest ever recorded. Christchurch in 2011 was 2X. Compared to a jet aircraft taking off where 0.1G is reached. (Alas, I failed to get the references to this research).

We can expect some winter consequences from the disruption these events have caused to housing and community wellbeing as the ‘Influenza Season’ is about to hit. The usual guessing games started some time ago, on how to pick the strains likely to hit this season, and what to cover with the vaccine. Will we have a pandemic? What will the predominate strain be? Does the strain in the southern hemisphere follow the Northern or vice versa? Some thinking lately suggests the Northern season follows the southern. There is talk of monitoring the situation to check this...a possible research project? Also will the bird flu strain of H7N9 in China mutate and spread between humans?

Vaccination programmes have been monitored and it is considered that the protection provided wears off or lessens later in the season, e.g. vaccinations in April are less protective in August/September. Western Australian health authorities are reported to be delaying the state vaccination programme to cover this.

New Zealand reported that last year found influenza-like illnesses were down, but a higher % of the elderly were hospitalised.

So will our hospital systems cope?

See accountant’s view on influenza later in this newsletter.

Graeme.
Do you have a research project or recent actual event lessons that you could share with others? They can be included in this section.

Lessons Learnt

‘TIPS’ Experts provide advice based on their experiences or reported news.

**Asthma Storm.**

The link to the thunderstorm asthma review for the newsletter at [https://www2.health.vic.gov.au/emergencies/thunderstorm-asthma-event](https://www2.health.vic.gov.au/emergencies/thunderstorm-asthma-event) There are videos of interest as well at this site.

**************


**New Disaster**

**New ‘man’-caused disaster.**

The ‘Wannacry’ hacking attack affected computer systems around the world in May. Some of the worst affected were the systems on the National Health Service and Ambulance in the UK. Patients were turned away and did not receive attention because of the hacking locking systems.

This was a health emergency! It highlights the need to plan for alternative systems as backups. The question is how, and how much to do this?

The following was circulated by the New Zealand Ministry of Health.

**CYBER SECURITY ALERT - WANNACRY RANSOMWARE**

There has been wide-spread media coverage today around a cyber security issue that is currently in circulation. The BBC has reported that; "A massive ransomware campaign appears to have infected a number of organisations around the world. Computers in thousands of locations have apparently been locked by a program that demands US$300 (£230) in Bitcoin. There have been reports of infections in more than 70 countries, including the UK, US, China, Russia, Spain, Italy and Taiwan.

National Health Service (NHS) services across England and Scotland have been hit by a large-scale cyber-attack, which is being treated as a major incident. A number of hospitals and GPs cannot access patient data after their computers were locked by a malicious program demanding a payment worth £230. There is no evidence patient data has been compromised, NHS Digital has said. The BBC understands up to 39 NHS organisations and some GP practices have been affected. Prime Minister Theresa May said that the National Cyber Security Centre (NCSC) was "working closely" with the NHS but agreed that there was no evidence patient data had been compromised.

Several experts monitoring the situation have linked the infections to vulnerabilities released by a group known as The Shadow Brokers, which recently [claimed to have dumped hacking tools stolen](http://www.evidenceaid.org/the-quarantine-conundrum-perspectives-for-the-humanitarian-community/) from the US National Security Agency (NSA). A patch for the
vulnerability was released by Microsoft in March, but many systems may not have had the update installed. Microsoft said on Friday its engineers had added detection and protection against WannaCry. The company was providing assistance to customers, it added.

WHAT YOU NEED TO DO:

- Be extremely cautious when opening email, email attachments and hyperlinks - THINK BEFORE YOU CLICK!
- Do not attach unauthorised USB’s or other mobile devices to Ministry computers.
- If you have any concerns that your work computer is infected immediately contact your Service Desk
- Ensure that your home computer’s operating system is up to date - latest Microsoft updates have been loaded and computer restarted to activate software updates.

PLEASE CIRCULATE WIDELY TO RAISE AWARENESS OF THIS ISSUE

WADEM News

Oceania Tales from Toronto
Toronto passes the baton to Brisbane
Frank Archer and Caroline Spencer

The 20th WCDEM attracted over 900 delegates from 63 countries to Toronto for an outstanding Congress with many personal and professional highlights. Oceania was well represented and now contributes two members on the WADEM Officer Group, Alison Hutton and Lydia Mayner, and four members on the new WADEM Board, Rowena Christensen, Joe Cuthbertson, Erin Smith and Vivienne Tippett. One highlight at the Closing Ceremony was the 'Passing of the Baton' from Toronto to Brisbane for the next Congress in two years’ time. Toronto certainly set the bar at a high level and Oceania is prepared for the challenge. Oceania Chapter Chair, Penny Burns, convened an informal meeting of the Oceania Group during the Toronto Congress and provided ongoing support to Vivienne Tippett in her multiple roles during the Congress as she ‘set the sails’ for Brisbane. Oceania is committed to supporting the WADEM Vice-President for Congresses, Dr Erin Downey, and the Brisbane Congress leadership in providing a rich professional, personal and social experience for all WADEM members.

Passing of the Baton (Professor Vivienne Tippett (left and Dr Laurie Mazurik (right)
WADEM Honours Professor Frederick 'Skip' Burkle Jnr and Dr Ian Norton

During the Opening Ceremony in Toronto, WADEM President, Dr Paul Farrell CD, announced that the WADEM Board had resolved to rename the WADEM Award for Global Leadership in Emergency Public Health as the Professor Frederick 'Skip' Burkle Jnr Award for Global Leadership in Emergency Public Health. This change recognizes Professor Burkle's lifetime contribution of excellence and leadership in defining and advancing the discipline of emergency public health at a global level, with particular acknowledgement of his mentoring of the next generation of emergency public health global leaders.

The announcement was greeted with a loud and sustained applause from the Congress participants. The first winner of the re-named Award for Global Leadership in Emergency Public Health is Dr Ian Norton, an Oceania member, for his significant contribution in leading the evolution and implementation of the WHO Guidelines for Foreign Medical Teams. Our warmest congratulations to both 'Skip' and Ian.

WADEM Research and Evaluation Frameworks

These innovative Frameworks represent a complete re-write and update of Guidelines originally introduced in 2003. The new Frameworks were progressively published as a collection of 9 Frameworks as peer reviewed papers in PDM during 2015/16. In 2016, the WADEM Board, on the advice of an external review committee, endorsed these Research and Evaluation Frameworks as a formal WADEM product.

At the WADEM Board meeting in Toronto, the Board initiated a Research and Evaluation Standing Committee to take Board responsibility to further advance, promote and evaluate the implementation of these new Frameworks. Acknowledging the importance of these Frameworks and their potential to further structure and advance the science of disaster health the Board, in consultation and with the support of Cambridge University Press, the Editor-in-Chief of Prehospital and Disaster Medicine, and the WADEM Co-ordinator, is pleased to make these Frameworks available to all as free access, and at no cost, off the WADEM website. You are invited to review these Frameworks at https://wadem.org/publications/frameworks/

If you click on each Part, a summary will appear and at the end of the summary is the link to the specific paper as published in PDM.
Prehospital and Disaster Medicine

The Editorial Board, under the leadership of the Editor-in-Chief, Prof Sam Stratton, held its usual business meeting in Toronto. Among many items discussed was the welcomed news that PDM is on track to achieve an Impact Factor by mid-2018. In the interim, input from a number of sources provided at the meeting reassured the Editorial Board that PDM remains either as the lead journal, or close to the lead journal, in our discipline. The Editorial Board expressed its appreciation to the Editor-in-Chief and to the Editorial Manager, Ellen Johnson, for their proactive support of authors, the relatively short turn-around time for peer review, and the quality of advice given to authors. Oceania members are encouraged to promote PDM to their colleagues and students, to publish in PDM and cite PDM papers where relevant in their own papers.

Congress reports

Abstracts are downloadable for free from PDM. https://www.cambridge.org/core/services/aop-file-manager/file/58ff83bf42e2c86c065b28a7 OR https://wadem.org/congress/toronto-2017/

Student Groups. From Ally Hutton VP Communities of Practice.

A reminder to anyone who wishes to start a student group - students can join WADEM for $30 US a year - and get access to PDM

You need to register the group with Knox Andress - and meet at least 4 times a year and have 3 interested students.

Students can also join the Student SIG by emailing haddon.rabb@gmail.com and letting him know they are interested in joining in on discussions.

We acknowledge Enrico L. (Henry) Quarantelli who passed away on Sunday, April 2, 2017 at the age of 92.

His research covered nearly every topic that is presently studied, sometimes only in a nascent form, but it is easy to see the intellectual origins of many ideas that we pursue now. Organizational change, emergence, volunteers, disaster mental health, emergency operations centers, warnings, evacuations, and emergency medical care among other subjects all form part of the vast corpus of research that undergirds modern disaster science.
Oceania Committee Members: Penny Burns, Hendro Wartatmo and Joe Cuthbertson.

Sukma Panggabean, Madelina Ariani, Penny Burns, Graham Dodd, Bella Donna.

Sukma is from the Indonesia Defense University. She presented about implementation challenges of pre-disaster effort by health crisis center MoH Indonesia.

Dr Bella and Madelina are researchers in the Disaster Management Division, Center for Health Policy and Management, Faculty of Medicine, Universitas Gadjah Mada. Dr Bella is Head of this Division and also a Lecturer in the undergraduate (medical and nursing students) and postgraduate programs (public health program) in our Faculty.

They are assisting hospital and primary health care to prepare a disaster health plans. Since 2010, they have developed a disaster health curriculum for medical students in FoM UGM. They are also conducting research with the Health Crisis Center, MoH 2016 to develop a guideline for Emergency Medical Teams in Indonesia 2017, and researching health sector emergency and disaster preparedness in some regions.

Abstracts present at WADEM 2017
1. Dr Bella: Level of local disaster health preparedness in Ambon District.
2. Madelina: Research based to maximize effectiveness of hospital disaster simulation.

Penny and Graham (GP or family doctor from Kamloops in Canada) are interested in starting a GP section in WADEM.

---

**Useful Courses and Resources**

**Edith Cowan University introduces new courses in Disaster and Emergency Response**

In response to growing interest in the existing Master of Disaster and Emergency Response (DER), Edith Cowan University has now introduced new Graduate Certificate and Graduate Diploma courses in the same stream. Students can now complete an online postgraduate qualification in DER in just six months. The Graduate Diploma can be completed online in one-year full time. Part-time opportunities are also available. On completion of either the Graduate Certificate or Graduate Diploma, students can then choose to progress into the Masters program. ECU’s Master program can be completed entirely online and is a nine-unit course which introduces students to the unique challenges of responding to and leading during disasters and emergencies.

For further information on any of the Disaster and Emergency Response courses at ECU, please contact Dr Erin Smith on Erin.Smith@ecu.edu.au


*************

**News from the Monash University Disaster Resilience Initiative (MUDRI)**

We are delighted and honoured to forward the following advice from the 2017 Mary Fran Myers Selection Committee: "Please join us in congratulating the winners of the 2017 Mary Fran Myers Gender and Disaster Award, Dr. Debra Parkinson, the late Ms. Claire Zara, and their colleagues at Women’s Health Goulburn North East (WHGNE), Women’s Health in the North (WHIN), and collaborative efforts with researchers based at the Accident Research Centre, Monash University’s Disaster Resilience Institute (MUDRI), Emergency Management Victoria, and Health Protection Office in Victoria, Australia.

The Mary Fran Myers Gender and Disaster Award recognizes disaster professionals who continue Mary Fran Myers’ goal of promoting research on gender issues in disasters and emergency management. As co-director of the internationally renowned Natural Hazards Centre, in Boulder Colorado, USA, Mary Fran Myers recognised that disaster vulnerability is influenced by social, cultural, and economic structures that marginalize women and girls. The Natural Hazards Centre and the International Gender and Disaster Network established the award in 2002 to honour women and men whose advocacy, research, or management efforts have had a lasting, positive impact on reducing disaster vulnerability.

Dr Debra Parkinson is a long-time researcher and advocacy campaigner with WHGNE/WHIN, and is an Adjunct Research Fellow with MUDRI. Over the past two decades, Debra’s novel research on gender inequality and gender based violence has led to transformative change in policy and practice. From 2009-2014, her research with the late Ms Claire Zara, a PhD Candidate at MUDRI, focused on environmental justice and the gendered impacts of disasters. Her standout research following the 2009 Black Saturday fires garnered national attention and catalysed the first workshop on domestic violence and disasters in 2012. This was then followed by research focused on men’s
The late Ms. Claire Zara was a researcher, journalist and published author, holding degrees in the arts, education, and children’s literature. Claire’s insightful research and compassionate spirit contributed new insights into gendered experiences in the wake of the 2009 Black Saturday fires, and her work was pivotal in a 2013 VicHealth award for ‘Family violence after a natural disaster: breaking new ground’. Among many other publications and accomplishments, Claire engaged internationally with United Nations Office for Disaster Risk Reduction’s publication, *Women’s Leadership in Risk Resilient Development: Good Practices and Lessons Learned* presented at a conference in Japan. Up until her death in 2015, Claire remained steadfast in her commitment to advancing gender equity in disaster risk reduction. As a testament to her contribution, the 15th Annual Emergency Management Conference hosted the Inaugural Claire Zara Memorial Oration.

Debra, Claire, and their colleagues’ efforts led to the Victorian Gender and Disaster Taskforce, which galvanized partnerships between government, university, and NGOs. In 2015/16, National Gender and Emergency Management Guidelines were developed with federal funding and engaging 350 stakeholders. The award recipients note the invaluable role of the local community in making this work successful!

Please join us in thanking this team for their hard work, serving as an inspiration to all of us. To learn more about the Mary Fran Myers Gender and Disasters Award, including more on this year’s award recipients and past winners, visit the Natural Hazards Centre Website,” with a link to this page: [http://www.gdnonline.org/](http://www.gdnonline.org/)

MUDRI is delighted to congratulate Debra, Claire and their colleagues on winning this prestigious International Award. Debra and Claire presented the Professor Frederick ‘Skip’ Burkle Jnr Keynote Lecture at MUDRI's 2013 Annual Research Symposium.

---

**Influenza**

An accountant’s view on Influenza.

Flu jab blunder brought unexpected benefits for Britain’s pension black hole

- Sarah Knapton, SCIENCE EDITOR, THE TELEGRAPH (UK)

29 March 2017 • 6:47pm

The flu jab blunder which contributed to the largest spike in deaths in a generation may have brought unexpected benefits for Britain’s pension black hole, a new report suggests. Latest projections from The Institute and Faculty of Actuaries (IFoA) show that the increase in the mortality rate in 2016 has slightly reduced overall life expectancy for the over 65s, down 1.3 per cent for men, and 2 per cent for women.

According to Mercer, the world’s largest human resources consulting firm, the shift has removed around £28 billion of pension scheme liabilities from the balance sheets of FTSE350 companies.

Last year, figures from the Office for National Statistics (ONS), found there were 16,415 excess deaths in the 2015/2016 winter, the largest percentage increase since 196(?), with flu blamed for the large increase. The extra deaths were fuelled by the flu jab being mismatched for the main

---

1 Alas the actual year was lost when copying this report. Graeme
strain of influenza, which unexpectedly mutated, meaning it worked for just one in three adults, compared to the 50 per cent it usually protects. The number of deaths in England and Wales was so high that it lowered life expectancy for girls born this year by two months to 79.3, and boys by three months to 82.9, the first fall in two decades.

This winter flu season also started earlier than usual, which meant 2016 was bookended by a surge of excess deaths, which has led to IFoA reviewing its Continuous Mortality Investigation model, which is used by most pension providers to estimate member’s life expectancy and adjust benefit schemes. “There’s some debate about exactly why this has happened,” said Glyn Bradley, Principal in Mercer’s Innovation, Policy and Research team. “Some point to the strain in the UK’s health and care system, caught between an ageing population and budget cuts. On the other hand, this winter’s excess mortality in the UK isn’t noticeably worse than for our European neighbours.

“What does seem to be occurring across the northern hemisphere is that winter flu has started comparatively early, starting in December in the UK. This means the calendar year 2016 could catch significant parts of two winter flu outbreaks, rather just one. “Hospital admissions, for example, appear to have peaked in mid-January, whereas in 2016 they didn’t peak until March.” Between 2000 and 2011 mortality rates improved quite quickly, but have largely plateaued since. “In broad terms, mortality is roughly where it was in 2011,” explained Bradley. “Quite reasonably, given the dataset, the CMI’s 2016 model produces lower rates of mortality improvements than previously, particularly over the next decade.

“However, that’s quite short-term when it comes to pensions planning. The long-term drivers of future improvements in life expectancy remain. “Medical research, application of past breakthroughs, innovative use of technology and potential for lifestyle improvements all mean that lifespans will continue to increase.” At the beginning of the year the pension liabilities for FTSE 350 employers were £857 billion, so the adjustment could remove around £28 billion of pension scheme liabilities from company balance sheets.

Andrew Ward, Partner, and UK Head of Risk Transfer at Mercer, added: “From a pension scheme perspective, this new data is still only a snapshot. “It’s possible that population experience isn’t completely representative of average pension scheme membership, and some significant risks remain in a world where an extra year of life expectancy can add 5 per cent to liabilities.

“Longevity is a major risk that few schemes have addressed in any way. Managing this now won’t be the right approach for everyone.”

---

**Member Profiles (What excites them)**

**Penny Burns**

**Passion:** patient-centred disaster healthcare

i.e. holistic biopsychosocial care for the person through the full PPRR of all hazard disasters

**Research arms and interests:**

PRIMARY CARE: Examining the capabilities and capacity of General Practice in disasters through augmenting existing systems and reducing current gaps in patient care, especially in the longer term recovery.
<table>
<thead>
<tr>
<th>MAID: Managing animals in disasters as awareness grows of animals as important members of human families and the effect of animal ownership on human safety in disaster evacuations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TUNNELS: Safety in tunnels is not just about engineering and exit tunnels. It is about how people behave when critical incidents occur in the unfamiliar confined environments of tunnels, and how we can help them to get out fast. In collaboration with the Sydney Harbour Tunnel, human behaviour in response to car fire incidents is studied with the aim of improving safety in evacuation.</td>
</tr>
<tr>
<td>DISASTER EDUCATION: Delivery of blended sequential release online disaster scenarios for students at undergraduate and postgraduate level.</td>
</tr>
</tbody>
</table>

**REQUEST FOR MATERIAL**

Material is required for any of the sections listed, or under a new category, if that is appropriate. Personal experiences, case and research reports are especially welcome and we ask that these are limited to no more than 1,000 words. The subject matter can be aspects of a disaster or response that is unusual because of its type, location or effects. Material is welcome from WADEM members and even non-members internationally.

Any suggestions regarding material for content, or to improve this Newsletter, are welcome.

Please forward contributions to (I’m pleased to announce) Sarah Weber at sarahweber175@gmail.com

**DISCLAIMER**

The comments, opinions and material in this newsletter are those of the respective authors and not necessarily those of WADEM or the WADEM Oceania Chapter.