

Presentation to BTRAG

3 June 2022



ISMM
International Society
for Mountain Medicine



KAITIAKIORA
TACTICAL MEDICINE NEW ZEALAND

Dr Malin Zachau, MBBS, DRCOG, DipIMC (retired)

New Zealand Society for Mountain Medicine



Vision:

- A standardised mountain medical capability for Aotearoa New Zealand

Mission:

- To advocate and support the development of mountain medicine in Aotearoa New Zealand.
- To improve national capability to access, treat and evacuate casualties in the mountain environment.

Goals:

- To bring together Outdoor and Healthcare professionals with an interest in mountain medicine
- To share best practice and aim for the highest standards of care in the mountainous and wilderness areas of New Zealand
- To encourage research and science in mountains, and in the people that enjoy them.



KAITIAKI ORA
TACTICAL MEDICINE NEW ZEALAND

Kaitiaki Ora - Tactical Medicine New Zealand

- Tactical Medicine is the delivery of essential life support in dynamic, high threat and hazardous environments with risk to the rescuer and / or casualty
- It focusses on providing medical care from traumatic injuries in threatening situations
- Supporting organisations (including civilian) to develop their tactical medical capability

International Society for Mountain Medicine



ISMM
International Society
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The society's goals are to:

- bring together physicians, scientists and allied professionals interested in mountain medicine
- to encourage research on all aspects of mountains, mountain peoples and mountaineers
- to spread scientific and practical information about mountain medicine around the world.

International Commission for Alpine Rescue



- ICAR provides a platform for mountain rescue and related organizations to disseminate knowledge with the prime goal of improving mountain rescue services and their safety.
- ICAR is an independent, worldwide organization that respects its members and promotes international cooperation.
- Potential for 2025 conference to be held in New Zealand

International Hypothermia Registry



Goal :

- To increase awareness and knowledge of accidental hypothermia by gathering sufficient relevant data through international networking, creating the largest database on deep accidental hypothermia.
- The Registry will enable the assessment of pre-hospital treatments, rewarming methods and survival factors as well as post-rewarming complications.
- This will allow the establishment of evidence-based knowledge and treatment guidelines, thus improving patients' outcome.

Synergies

- * Austere extended care
- * Spontantous volunteers/ Immediate responders
- * AF8?

BTRAG

Specialist, technical rescue groups

- * Civilian, Police & Defence Force hazardous environment rescue and medical care

- * Training, education & standards setting
- * Alpine Cliff Rescue
- * Avalanche rescue
- * Crevasse rescue
- * Hypothermia
- * Antarctica NZ
- * ICAR
- * ISMM

NZSFMM

Increasing mountain/wilderness/austere emergency medicine capability

Outdoor professionals
Rescue organisations
Universities
Ambulance
HEMS
Health NZ
IHR

Tactical Medicine NZ

Direct and indirect threat rescue and extended austere care

NZDF
Police
Ambulance
HEMS
MoH & Health NZ
International tactical
medicine oragnisations

- * Standards setting, education and advocacy
- * In-situ / Immediate responders
- * "Stop the bleed"
- * Hunting specific first aid



Activities relevant to BTRAG

- SHAC 2017, 2019 and 2021: total of 6 educational sessions
- Dr Paul Martin: Doctor to RARO
- Canterbury Pre season ski field & Winter response team education
- Canterbury Winter Response team Medical Advisor role (Dr Robin Barraclough)
- NZ SAR Avalanche readiness guidelines writing group
- Australian Shark Bite public access trauma kit consultancy
- Immediate Care Paramedics: Antartica NZ Traverse Team education
- ICAR MedCom and ISMM representation

Future activities

- Pre season ski field education (Robin & Malin)
- Hypothermia & avalanche rescue training session for HEMS NZ (Malin)
- Standing orders for medications suitable for volunteer rescuers / guides (Robin)
- Game Animal Council online first aid course for NZ hunters - content consultation (Malin)
- Medical Student elective winter 2023 (many Society members & associates)
- DiMM faculty development (many Society members)
- ISMM / ICAR world congress sometime in the future: I now have clarity about possible dates

Activity Report

Please see handout for full annual activity report



Planned Congresses



- 2022 - Montreux, Switzerland
- 2023 - Toblach, South Tyrol
- 2024 - TBC
- **2025 - TBC (possibly NZ)**
- 2026 - Austria (ÖBRD 80th Jubilee)



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- 2022 - N/A
- 2023 - N/A
- 2024 - USA (with WMS)
- 2025 - N/A
- **2026 - TBC (possibly NZ)**

Discussion



Sarah Buckoms, currently overwintering at South Pole Station

**Slides below this were a handout:
Full activity report for NZSFMM**

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K A I T I A K I O R A
TACTICAL MEDICINE NEW ZEALAND

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Synergies

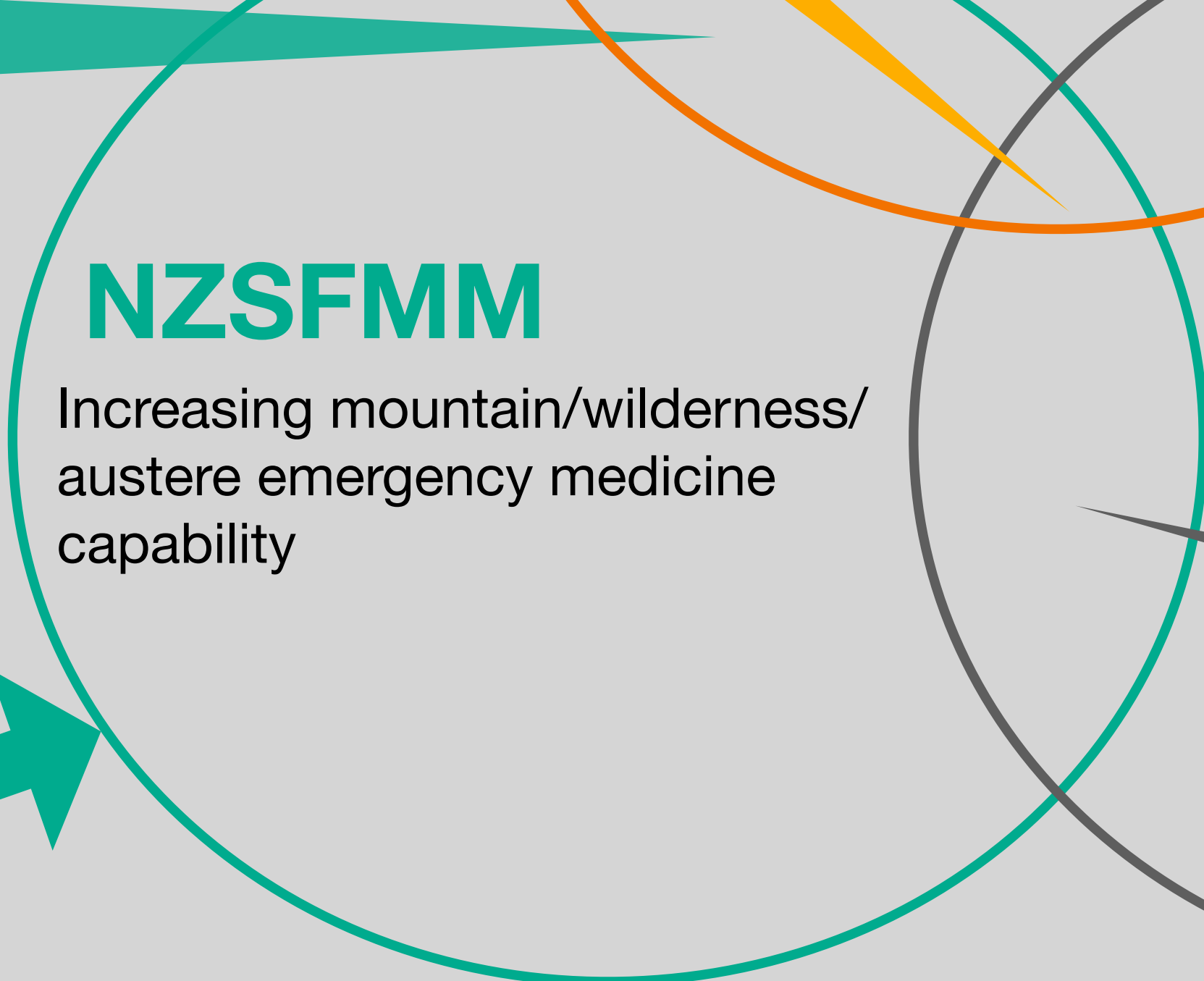
* Civilian, Police & Defence Force hazardous environment rescue and medical care

* Austere extended care
* Spontaneous volunteers/ Immediate responders
* AF8?



NZDF
Police
Ambulance
HEMS
MoH & Health NZ
International tactical medicine organisations

* Standards setting, education and advocacy
* In-situ / Immediate responders
* "Stop the bleed"
* Hunting specific first aid



* Training, education & standards setting
* Alpine Cliff Rescue
* Avalanche rescue
* Crevasse rescue
* Hypothermia
* Antarctica NZ
* ICAR
* ISMM

Outdoor professionals
Rescue organisations
Universities
Ambulance
HEMS
Health NZ
IHR

NZSFMM annual activity report Feb 2021- May 2022 (Slide 1 of 5)



Deliver continued professional development / educational & social events

- February hybrid: “Introduction to hand injuries in rock climbers”
- online June “What’s in your first aid kit?”
- online November “Decision making in the wilderness”

Forum :

- Over 40 discussions/ announcements on the Forum in the last 15 months , with a total of 80 members.

Facebook page :

- 26 posts by Admin, 340 followers

Projects delivered by members:

- Education committee collaborating with Otago University about Medical student elective.
- Articles in Avalanche Dispatches September issue on concussion & AvaLife (Robin)
- British Mountain Medicine Blog Mountain bike injuries (Robin)
- Article in NZOIA quarterly magazine on alcohol swabs as anti nausea management (Campbell)
- Sarah and Aleksandra delivered inaugural Kiwi SOLO Wilderness First Aid course
- Article on “Shift extension” Paramedic ski patrol in the mountains - lived experience(Matt)

NZSFMM annual activity report Feb 2021- May 2022 (slide 2 of 5)



Promote good international standards; members to present at local and international conferences

- SHAC Wanaka: AvaLife workshop with 6 manikin scenarios (Robin)
- SHAC Wanaka: “Determination of death in mountain rescue” (Malin Sarah & Danny)
- Alpine Club meeting presentation “A review of Medical issues in the outdoors” (Robin)
- Tactical Medicine Australia virtual summit conference presentation: Hypothermia (Malin)
- Canterbury Mountaineering Club evening: Hypothermia educational Kahoot quiz (Malin)
- Australian Tactical Medicine Association virtual conference presentation: Avalanches in NZ (Malin)
- AWEMS virtual conference presentation: Hypothermia (Malin)
- FMC magazine : Hypothermia article



Building lasting relationships with identified organisations
Slide 1 of 3

- Revision of First aid book for FMC (Robin, Malin & Justin Venable)
- Medical Advisor on Canterbury Winter Response team (Robin)
- Collaboration with "PEAK Safety" to correct picture on their website for adrenaline administration (Campbell)
- Impartial promotion of CellaED- the tiny defibrillator (Campbell)
- Doctor for RARO (Dr Paul Martin)
- Suspension trauma article (Journal of Canadian Emergency Nursing) correction with ICAR MedCom group (Malin)
- Persys Medical supplied with bibliography of most recent hypothermia literature on their request (Malin)

NZSFMM annual activity report Feb 2021- May 2022 (slide 4 of 5)

Building lasting relationships with identified organisations Slide 2 of 3



- International Hypothermia registry custodianship awarded to NZSFMM
- ISMM World congress submission prepared with Tourism New Zealand - on hold (Malin & Robin)
- Elected Vice President to ISMM (Malin)
- Pre season skifield & Canterbury Avalanche Response meeting: Introduction of AvaLife (Malin)
- ELSO : ECMO hypothermia paper published : participant of the international working group (Malin)
- Australian Shark bite marine trauma kit collaboration (Ongoing) (Malin)
- Red Stag Timber Hunters club Individual First Aid Kit (IFAK) consultation (Malin)
- MIBIE public consultation on Adventure Activities (Malin & Drew)
- Canterbury DHB Pathways further feedback of Hypothermia pathway (Malin)

NZSFMM annual activity report Feb 2021- May 2022 (slide 5 of 5)



Building lasting relationships with identified organisations

Slide 3 of 3

- AWEMS requested for be to be their liaison with ISMM , accepted (Malin)
- Antartica New Zealand Traverse Team education delivered by Stuart Cooper, Immediate Care Paramedics
- NZ Certificate in Emergency Care (first responder) delivered to ski patrol by ProMed Society member (*Free to undertake.*)
- Workforce development council : Toitu te Waiora made contact for feedback on first aid training curriculums. (Malin)
- ECCT presentation on International Hypothermia registry (including two videos made by friends in Spain & UK) (Malin)
- NZSAR Avalanche readiness guidelines review working group (Malin)
- ICAR MedCom meetings by zoom in May, December 2021 and May 2022 (Malin)
- ISMM committee meetings by zoom in January and May 2022 (Malin)

NZSFMM annual activity report Feb 2020- Feb 2021 and before



Activities during the year 2020-2021 (Main unless otherwise specified)

- Poster at ISSW virtual conference in Fernie, British Columbia: Avalanches in NZ
- ICAR virtual MedCom presentation: Avalanches in NZ - analysis of coronial data
- ICAR virtual congress presentation: Avalanches in NZ - analysis of coronial data and rescue considerations
- Poster at National trauma Symposium, Wellington :
- NZ Avalanche Dispatches article
- Assisted Mountain Safety Council with report for coroners
- St John Ambulance CPG on hypothermia & avalanche 2019-2022: member of writing advisory group
- NZ frostbite patient assisted with management via collaboration with Prof Chris Imray, UK (Robin)
- **2019** : ACEM conference presentations: poster & verbal on Hypothermia in NZ and Avalanches in NZ
- **2018**: NZ Resuscitation Council conference poster: NZ hypothermia analysis of coronial data
- **2018 & 2019**: Cold environment specific PHEC update for Antarctica NZ Field trainers
- **2018** LandSAR Blenheim Conference presentation & NZSAR website resource Hypothermia flowchart