



# Australian Ski Patrol Education and Training

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Special interests in Pre-Hospital and Wilderness Emergency Medicine

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# Outline of presentation



- Australian Ski Patrol Association education and training;
- In-resort training and assessment: Mt Baw Baw Alpine Resort; and
- Training opportunities in Polar Medicine.



# Organisational aspects of Ski Patrol training



- Individual ski patrols in Victoria, Tasmania and New South Wales (paid/volunteer patrollers);
- Umbrella body: Australian Ski Patrol Association;
- ASPA Education Committee;
- ASPA Medical Advisory Committee;
- ASPA Advanced Emergency Care Manual; and
- Annual Advanced Emergency Care Course (units from Australian Federal 'Health' and 'Public Safety' Training Packages).



# ASPA AEC Course



- The ASPA AEC Course includes the following units:
  - HLTAID003 Provide first aid;
  - HLTAID005 Provide first aid in a remote situation;
  - HLTAID006 Provide advanced first aid;
  - PUAEME003C Administer oxygen in an emergency situation; and
  - PUAEME005A Provide pain management.



# ASPA AEC Course



- Courses for 'first-timers' (and recertifying patrollers) held annually in Melbourne, Sydney and Tasmania;
- Held over two weekends;
- Online learning plus three days of face-to-face training and final 'exam day';
- Training is mainly 'hands-on';
- Shorter courses for re-certifying patrollers (normally two days) held in-resort from time to time e.g., Mt Buller and Falls Creek in Victoria and Thredbo and Perisher in NSW;



# Organisational aspects of Ski Patrol training



- *Main Education Committee responsibilities:*
  - Planning for and running the major AEC courses and liaising with the course directors of the satellite courses;
  - Managing the trainer/assessor pool and running the annual update days for trainers;
  - Putting together the course materials; and
  - Assessment and certification of candidates.



# Organisational aspects of Ski Patrol training



- *Main Medical Advisory Committee responsibilities:*
  - Keeping the ASPA AEC Manual up-to-date and ensuring consistency with current Australian Resuscitation Council guidelines;
  - Reviewing the course materials for consistency with the Manual and current ASPA practice guidelines;
  - Providing trainer/assessors with an update on changes since the previous year; and
  - Attending annual trainer update days to explain any significant changes and provide clarification as needed.



# ASPA AEC Course



- Patrollers must re-certify every three years; and
- Patrollers must complete core competencies annually either at a course or in-resort: CPR/defibrillation, Oxygen, Penthrane, Entonox and Auto-injectors (e.g., Epi-Pen).





# ASPA AECC Trainer/assessors



- Trainer/assessor pool drawn from experienced patrollers;
- Minimum requirements:
  - Trainers must hold a current ASPA first aid qualification or alternatively a current Advanced First Aid certificate or have at least three years experience as a health professional, nurse or emergency services provider; and
  - From 2015 must hold a Certificate IV in Training and Assessment TAE40110 (or currently be working towards this qualification).



# ASPA AECC Trainer/assessors



- *Essential requirements:*
  - Ability to deliver training and assess in a group situation or one on one;
  - Conform to standards with relation to completion of documentation;
  - Flexibility with training needs of clients; and
  - Ability to prioritise and organise training sessions with trainees and their mentors.



# ASPA AECC Instructors



- ASPA is an accredited 'Registered Training Organisation' (RTO);
- This comes with compliance and audit requirements;
- This includes the 'no exceptions' requirement that from 2015 all trainer/assessors will be required to hold a government-accredited 'Certificate IV in Training and Assessment TAE 40110';
- This involves an outlay of both time and money;



# ASPA AECC Instructors



- The Certificate IV TAE requirement poses a challenge for ASPA;
- Trainers are volunteers;
- Many do not work in adult education and would find it difficult to justify the time and money investment in a Certificate IV TAE;
- ASPA has obtained some government funding to subsidise ten places in a 2014 Certificate IV TAE course; and
- ASPA will repay the cost over three years to other trainers who obtain a Certificate IV TAE.



# ASPA AECC Instructors



- The Certificate IV TAE 40110 consists of seven core units and three elective units. The core units are:
  - TAEASS401B Plan assessment activities and processes;
  - TAEASS402B Assess competence;
  - TAEASS403B Participate in assessment validation;
  - TAEDEL401A Plan, organise and deliver group-based learning;
  - TAEDEL402A Plan, organise and facilitate learning in the workplace;
  - TAEDES401A Design and develop learning programs; and
  - TAEDES402A Use training packages and accredited courses to meet client needs.



# ASPA AECC Instructors



- Instructors must renew their currency annually;
- Must complete the same online pre-course material as candidates, all written assessments and the practical competencies;
- This must all be completed prior to the commencement of the course in which they will be instructing and assessing; and
- Instructors must attend an annual “Instructor Development Day” in order to be able to instruct at that year’s courses.



# ASPA AECC content



- First responder role, remote area first aid and medico-legal issues;
- Anatomy and physiology of the body systems;
- Approach to the casualty (DRSABCD used in Australia), including Primary Survey, Vital Signs Survey and Secondary Survey and multi-casualty triage;



# ASPA AECC content



- Basic Life Support (DRSABCD): CPR and defibrillation (AED) and the Chain of Survival;
- Respiratory system emergency management;
- Cardiovascular system emergency management;
- Nervous system injuries (including Glasgow Coma Score assessment);





# ASPA AECC content



- Fractures, dislocations, sprains and strains;
- Management of limb injuries;
- Practical application of slings and splints;



# ASPA AECC content



- Pain and inhalational relief;
- Injury due to temperature extremes (cold injuries and heat injuries);
- Medical conditions (diabetes, epilepsy and heart disease);
- Poisoning, bites and stings (Australian context);



# ASPA AECC content



- Other traumatic injuries:
  - Electrical injuries;
  - Amputations;
  - Crush injuries;
  - Eye injuries;
  - Dental trauma;
  - Avalanche casualties; and
  - Harness suspension trauma;



# ASPA AECC content



- Childbirth;
- OHS and Infection Control; and
- Practical application of knots.



# Assessing competency



Based around:

- Pre-course online learning:
  - Video lectures;
  - Practical skills videos;
  - Quizzes;
  - Multiple choice pre-course paper (open book);



# Assessing competency



Based around:

- Small number of ‘live’ lectures;
- Multiple choice ‘quick quiz’ (closed book);
- Group scenario workshops; and
- “Sign-off” of demonstrated skills and core competencies;



# Assessing competency



Skills	
C-collar (sitting/supine/lateral)	Collar and cuff sling
Spine board and scoop stretcher	Arm sling
Taking a radial pulse/BP	Elevation sling
SAM splint	Air splint
Vacuum splint	



# Assessing competency



Core Competencies	
CPR/AED with face mask	Oxygen
Upper leg injury/traction splint	Penthrane
Bleeding	Entonox
Asthma management	Auto-injectors (Epi-Pen/Ana-Pen)
Conscious casualty	Unconscious casualty





# ASPA AECC assessments



- Final multiple choice exam (closed book); and
- Two final practical scenario-based assessments: Conscious and Unconscious Casualty.



# Training and Assessment: Mt Baw Baw in-resort model



- All resorts require ski patrollers to have graduated successfully from an ASPA AEC Course and “to be current”;
- Some resorts conduct their own in-resort training and assessment in addition to the ASPA AEC Course; and
- As a ‘risk management strategy’, Mt Baw Baw (Victoria) established a ‘Training and Assessment Team’ in 2011 to deliver a pilot three-year program.



# Training and Assessment: Mt Baw Baw in-resort model



- The four TAST members are all female senior patrollers and ASPA Trainer/Assessors and three members of the team are health professionals (medical, nursing and optometry);



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# Training and Assessment: Mt Baw Baw in-resort model



- The model includes three key components:
  - Annual training (usually over two days) covering both revision and consolidation of key first aid areas and topics which have been identified during the season as needing further development;
  - Additional practical skills competencies (e.g., hygiene, wound care kit, management of eye injuries); and
  - Resort-specific scenario-based competencies.



# Training and Assessment: Mt Baw Baw in-resort model



- Following the scenario competencies, patrollers receive constructive feedback and guidance on areas for further development during the season;
- Additional 'ad hoc' training is conducted during the season e.g., on quiet or no-snow days; and
- Despite some initial resistance, the program became well-accepted and led to a fundamental 'sea change' in patrollers' attitude towards competency-based training.



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# Extending our skill sets: training in Expedition and Polar Medicine



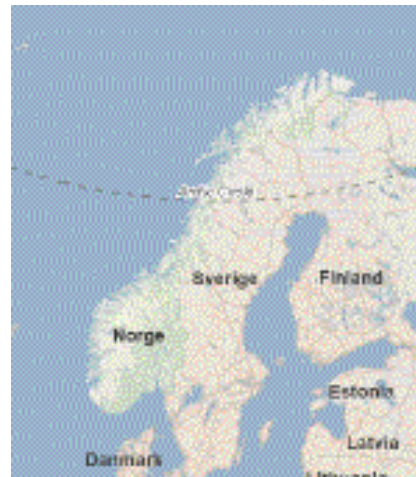
- Commercial courses in polar medicine are offered in Australia, New Zealand and Norway on an annual basis;
- The NZ and Norwegian courses are offered by a British company, Expedition Medicine Ltd; and
- Local courses are offered in Australia by General Practice Training Tasmania.



# Polar Medicine in Norway



- Five-day course.
- Late January/early February (cold, dark, windy ...)
- Based in Alta, Norway (high above the Arctic Circle).
- Combination of lectures, practical sessions and outdoor activities.



# Polar Medicine in Norway



- *Teaching sessions:*
  - Day 1: Navigation, stoves, hypothermia and frostbite;
  - Day 2: Pre-expedition planning, altitude, shelter construction, medical kits and communications; and
  - Day 3: Mountain expedition briefing, preparation and distribution of stores.





# Polar Medicine in Norway



- *Practical sessions:*
  - Day 1: Dog-sledding on the Alta River;
  - Day 2: Snowmobiling, snowshoeing, fire-lighting, wilderness resuscitation, improvised carry, evacuation scenario;
  - Day 3: Ski touring, night ski navigation using GPS to overnight snow camp (tent);



# Polar Medicine in Norway



- *Practical sessions:*
  - Day 4: Ski to second camp in the mountains, snow hole briefing, digging snow holes, sleeping in snow holes;
  - Day 5: Ski back to lodge (in a blizzard!), ice drills, cold water immersion exercise (ice-hole in river) and finally, the Ice Hotel.



# Polar Medicine in Norway

