

Appendix F

The Rationale for the IBTPHEM National Introductory Course for Training in Pre-Hospital Emergency Medicine

Appendix Outline

F.1	Introduction	1
F.2	Developing the Essential Knowledge, Skills and Behaviours for Safe Working	2
F.3	Psychosocial Resilience	3
F.4	The IBTPHEM's Experience of the National Introductory Course	3
F.5	Trainee and LEP Experience of the National Introductory Course	5

F.1 Introduction

F.1.1 Pre-Hospital Emergency Medicine (PHEM) involves working outside of the normal hospital environment, travelling to and from incident scenes by response car or helicopter and providing pre-hospital critical care to the most seriously ill and injured patients. Incident scenes span the full spectrum of Ambulance Service activity and include domestic, highway, railway, agricultural and industrial settings. They also include incidents with high expressed emotion, interpersonal violence and crowds. PHEM subspecialist deployment is also typically focused on the

more complex and severe incidents and, in a significant proportion of cases, the practitioner may be the first to arrive at an uncontrolled incident scene.

F.1.2 The PHEM operational environment is recognised to be very different from the hospital environment and characterised by a broad range of significant and dynamic hazards and risks. This presents a unique challenge in the training of PHEM subspecialist practitioners.

F.1.3 The Management of Health and Safety at Work Regulations 1999¹ stipulates that local education providers (LEPs), as employers, so far as is practicable, require any persons at work, who are exposed to serious and imminent danger, to be informed of the nature of the hazard and of the steps taken, or to be taken, to protect them from it. The law also requires pre-hospital service providers, who may not be LEPs, to undertake risk assessments and ensure trainees have the knowledge to maintain a healthy and safe working environment for themselves and their colleagues. It is essential that training related to safe working occurs as early as possible in a placement or rotation.

F.2 Developing the Essential Knowledge, Skills and Behaviours for Safe Working

F.2.1 The PHEM syllabus explicitly lists the ranges of operational environments and clinical presentations likely to be encountered. Some LEPs have developed innovative programmes to try and address the learning and training needs of new staff during phase 1(a) – the introductory phase of PHEM subspecialty training. It has been recognised that many elements of this training relate to local organisation-specific issues including healthcare system geography, clinical and non-clinical equipment, emergency response co-driving and helicopter aircrew member or medical passenger roles. There are also broader elements of introductory training related to hazard perception and awareness, dynamic risk assessment and team resource management. Many LEPs have struggled to deliver the full spectrum of generic and organisation-specific introductory training and have struggled to ensure that PHEM trainees have developed sufficient operational awareness prior to deployment to allow them, even under direct supervision, to simultaneously focus on both the clinical and the environmental and operational challenges. This has led to trainees deploying to operational environments that they have never experienced, or received specific training in managing.

F.2.2 To address these challenges, the IBTPHEM created the National Introductory Course for Training in PHEM as an option for all trainees and LEPs since 2014. This has allowed LEPs to separate generic operational safety training from LEP-specific training and for trainees to experience more comprehensive and standardised introductory training.

¹<https://www.legislation.gov.uk/uksi/1999/3242/regulation/8/made>

F.3 Psychosocial Resilience

F.3.1 PHEM subspecialty trainees face unique challenges during their training compared to other specialty trainees. They must adapt to the operational environment, integrate with LEPs, and fulfil rigorous curriculum requirements whilst also working in relatively remote settings with long commutes and/or the need to physically relocate due to the limited geographical spread of training posts currently available. Duty periods typically reflect aviation duty periods of 10 to 12 hours' duration with highly variable shift intensity and frequent late finishes. Despite working in tight-knit service providers with high levels of local support and supervision, trainees report a degree of social and professional isolation. The clinical workload experienced by PHEM trainees is challenging cognitively, emotionally and psychologically. Trainees are frequently exposed to situations in which there is a high level of expressed emotion and visually unpleasant scenes, which are commonly regarded as emotionally challenging and distressing. They experience extraordinary events first-hand and witness suffering, distress and death with unusually high frequency compared to other areas of medical practice.

F.3.2 In addition to these stressors, the high levels of supervision in PHEM subspecialty training and detailed scrutiny of all aspects of care can be intimidating and challenging and lead to feelings of underperformance. That most LEPs currently have only a small number of trainees at any one time increases the risk of psychological distress. The IBTPHEM and Faculty of Pre-Hospital Care have commissioned detailed work to explore ways to optimise psychosocial and mental health for all pre-hospital care personnel. Perhaps the most important protective factors in developing and sustaining psychosocial resilience are:

- education about primary stressors (the sources of worry or anxiety that stem directly from the events and consequential tasks that trainees face) and secondary stressors (pressure from peers, relationships, changing organisational demands, and logistics) and,
- developing and sustaining team cohesion and peer support.

F.4 The IBTPHEM's Experience of the National Introductory Course

F.4.1 The IBTPHEM course, now entering its 9th year, is a seven-day residential course, held at one of the nationally recognised emergency service training venues (e.g. the Fire Service College, Gloucestershire or the Waddington Training Facility in Lincolnshire). These venues provide the full range of operational scenarios within a managed training environment. The course is specifically designed for those commencing their PHEM careers and is specifically scheduled to commence just after the August medical rotation transition date. It allows for LEP administrative induction to take place prior to generic safety training.

F.4.2 Following an introductory day with orientation to the PHEM subspeciality curriculum, the basic course structure involves rotation of teams of participants through six scenarios each day. Each scenario is intended to immerse participants in one of 36 specific operational settings and includes elements of full- and part-task human simulation. Scenarios range from dealing with common patterns of illness and injury, through to more challenging and uncommon situations such as multiple casualty incidents. Each day also includes practical workshops and interactive lectures and debriefs. The training venues support outdoor scenarios, which run whatever the weather. All the scenarios are teaching scenarios which maintain a psychological safe space for debriefing, learning and development. They are all mapped to the phase 1(a) curriculum.

F.4.3 The course is delivered by a multi-professional and representative expert faculty of experienced medical trainers drawn from all ten PHEM LEPs, supported by Ambulance, Fire, Police and other rescue professionals. This introduces trainees to the capabilities of these services and the challenges of inter-agency working.

F.4.4 The course is formative in nature – there is no assessment. From a medical perspective, participants are assumed to have technical medical skills commensurate with their grade and specialty but no prior pre-hospital experience. These existing skills are then applied and modified to pre-hospital scenarios with participants learning to manage the clinical presentation alongside challenges such as safe approach and working, patient handling, extrication, immobilisation and transfer.

F.4.5 Although the course covers the currently accepted clinical management of typical presentations, it is organisationally agnostic in terms of LEP and service-specific equipment, techniques and standard operating procedures. Essential, generic pre-hospital technical skills are introduced, including the use of ambulance equipment and some emergency surgical procedures.

The course learning outcomes are focused around:

- How to identify hazards, assess risk, and work safely in a range of environments. These include exposure to scenarios on highways, around vehicles, on railways, at height, near water and at domestic, industrial and agricultural environments.
- National Operational Guidance and control measures related to some of the specific hazards found at height, in confined spaces, at fires, around collapsed structures, with hazardous chemicals, at scenes of violent assault and with casualty manual handling.
- The challenges of treating ill or injured patients across the range of ages, from neonates to elderly adults, alongside the additional considerations required for pregnant or bariatric patients.

- Human factors and team resource management concepts, as applied to the high-tempo pre-hospital environment. Participants are introduced to working in flash teams, and begin to appreciate techniques to lead unfamiliar groups of professionals amidst distractions and other hazards.
- How debriefing, critiquing and discussing cases plays a vital role in PHEM practice – improving personal skill, developing procedures and maintaining standards.
- The role of inter-personal relationships and their importance in developing and maintaining psychosocial resilience.

On completion of the course, trainees return to their LEP for organisation specific training.

F.5 Trainee and LEP Experience of the National Introductory Course

F.5.1 Detailed feedback over the past 8 years has been universally positive. Trainees often describe the experience as one of the most formative of their careers and LEPs have been able to focus their local induction training on specific local operational equipment, policies and procedures. Trainees and LEPs have expressed the view that trainees have a much better exposure to the full range of operational hazards and risks, a higher safety awareness and a fuller appreciation of the principle of dynamic risk assessment.

F.5.2 PHEM trainees also report that the delivery style, scale, and residential nature of the course does enable the development of a close peer support group which lasts throughout their PHEM training and beyond.

F.5.3 In terms of cost-effectiveness, the economy of scale secured by a national course ensures that all emergency services and all operational scenarios are systematically represented. At a cost of £2500 per delegate, the course has achieved financial balance in each of the past 3 years – despite the additional costs of CoViD-Secure working. LEPs that have attempted to undertake local training to this extent have typically experienced similar or higher cost pressures in addition to the operational pressures related to running a clinical service at the same time. Feedback from LEPs has been that the delegation of generic safety training to the IBTPHEM National Introductory Course for Training in PHEM has had a significant positive benefit for trainees and LEPs.

