



Faculty of Public Health

Of the Royal Colleges of Physicians of the United Kingdom

Working to improve the public's health

Health Protection Training for generalists in public health, including Educational Requirements for on-call

General Principles

The purposes of training in health protection (HP) for those undertaking prospective generalist training in Public Health (PH) are so that:

- all generalist public health staff have a basic understanding of this important constituent of public health (which, for those in training (referred to as 'trainees' in this document), will be assessed as part of MFPH and RITA or their successors).
- those who take part in NHS on-call rotas or their equivalent, are competent and confident to undertake their on-call duties.
- those who will become DsPH or equivalent posts are aware of the breadth of health protection activities that they will be responsible for ensuring are adequately provided for their populations by the NHS, HPA/HPS/NPHSW and others, including what on-call arrangements are necessary.
- health protection continues to be seen as an integral part of public health by PH generalists and HP specialists alike.
- those who train in public health remain competent to apply for consultant posts with health protection responsibilities.
- all public health staff could contribute effectively to local incidents requiring surge capacity or to a national public health emergency, such as an influenza pandemic or re-emergence of smallpox.

Training for on-call

Defining the competencies required for those who undertake on-call duties is essential to ensure that Health Protection on-call services are provided to high and consistent standards and to meeting clinical governance requirements.

The background knowledge and some of the practical experience needed to undertake unsupervised public health (consultant level) on-call duties can be gained during normal working hours. However, actual out of hours on-call experience is important because:

- The risk assessment for public health problems out of hours is different to that within hours ("what are the health consequences of delaying until office hours: what actions need to be done now and what can wait?").
- The range of support services or expert advice available, both within and outside the organisation, are different (ie less), the methods of contacting them are also different (ie usually more difficult) and access to support tools (eg IT and communication tools) may be less.
- Effective handover pre and post on-call is a particular skill that is necessary for actual on-call practice.

- For those who will practice in general public health, most of the health protection that they will do as a consultant/specialist is likely to be on-call: therefore on-call training better replicates the situation that they are training for than within hours experience. Training for on-call needs to be clearly focused on training needs, which would suggest:
- Ensuring that those in training are properly briefed, supervised and debriefed (including feedback) to ensure that learning opportunities are fully taken.
- An appropriate time for trainees to start their out-of-hours on-call experiential training might be at the start of their 3-month health protection attachment, as proper preparation and debriefing likely to be easiest at this time.
- Trainees should complete a log book (both within and out of hours), including a section for reflective learning that can be reviewed and discussed with the trainer
- Rotas should be constructed to give the maximum training experience per hour on-call. This could involve trainees covering larger areas than previously (where geographically feasible), as the amount of experience per hour on-call is likely to be proportional to the size of population covered. In addition, audit of on-call rotas is likely to reveal that some periods are consistently busier than others in terms of the number of calls or the necessary action per call: e.g. Saturday and Sunday daytime and evenings may be more useful experience than weekday nights.
- Part-time or flexible trainees also undertake on-call training. In terms of training need, rather than service provision, the key periods of on-call health protection training are at pre-exam and pre-consultant stages. In total, training for this group need not amount to more than the total on-call training that is generally undertaken by full-time trainees.

There are some scenarios for which we would wish to train all PH generalists and HP specialists, but which are relatively unlikely to be experienced by all on-call trainees. Although perhaps not a complete substitute for experience of the real thing, properly designed exercises and interactive scenarios could substitute to ensure that a minimum level of competence is achieved and maintained in these areas. This will be equally relevant to existing Consultant staff as part of their CPD programme to maintain their own competence. As such scenario-based exercises are developed and their training outcomes assessed, the possibility of expanding the role of validated teaching tools compared to actual experience can be re-assessed for further areas of HP training.

Annex A sets out the basic knowledge, skills and attitudes that are needed before trainees and others can undertake *supervised first response public health on call duties (equivalent to a SpR/SpT level)*: however, these practitioners should always be supervised by someone who has the competencies required for unsupervised public health on call (see below).

Annex B defines the competencies that are necessary in order to undertake *unsupervised public health on call duties (equivalent to DPH/CPHM)*: this can

be used as a series of educational objectives, the achievement of which would suggest that a trainee could be signed off as competent in Health Protection at the level expected to achieve CCT. However, if the practitioner is not trained/practising as a health protection specialist (eg CCDC), then when on-call, (s)he should always have access to advice from a health protection specialist for difficult, serious or rare problems (this is particularly important for managing outbreaks and incidents). This '*specialist health protection*' role could be provided in a number of ways, eg by a third on CCDC rota in England or by a national centre in the other countries of the UK: health protection specialist/third on call competencies will be the subject of a separate paper.

For those already in training, these guidelines will not be introduced in a retrospective manner: log books need not include experience from before the introduction of these guidelines and competencies measured by numbers or time could be introduced as a pro-rata target based on the length of training remaining. These requirements are primarily designed for those in training rather than existing Consultants, who may have different but equally valid experience: however, these standards can be used by existing Consultants to assess the level of experience and training they have received and use to inform their CPD/PDP plan, eg by attending training events that would compensate for lack of recent experience in certain areas.

In both annexes, titles of relevant individuals and organisations may be different in different countries and the equivalent title should be substituted.

Annex A: Educational Requirements for undertaking:

SUPERVISED FIRST RESPONSE PUBLIC HEALTH ON-CALL (Equivalent to SpR/SpT)

Requirements	Demonstration of minimum standard	Further development of competence*
1.1 Understanding of the professional responsibilities of being on-call, including <ul style="list-style-type: none"> • Professional obligations re availability, sobriety, confidentiality, ethics etc • Ensuring adequately prepared (eg contact numbers, access) • Recognition of competence and when to seek advice 	<ul style="list-style-type: none"> • Discussed in induction programme for new trainees, particularly those who have not taken part in clinical on-call in past: could include session where trainee demonstrates understanding by explaining responsibilities to trainer. 	
1.2 Understanding of the local on-call procedures, including arrangements for: <ul style="list-style-type: none"> • Advice and support • Roles and responsibilities, including for administering chemoprophylaxis • Handover and feedback 	<ul style="list-style-type: none"> • Discussed in induction programme: for new SpRs/SpTs, this could include session where trainee demonstrates understanding by explaining arrangements to trainer. • Explanation of standard forms for information collection and recording of advice during induction. 	<ul style="list-style-type: none"> • Three month attachment at Local HPU in line with FPH guidance (2003) • Use of standard forms for information collection and recording of advice during LHPU attachment, including feedback on adequacy of completion
1.3 Understanding of the role of others in the control of infection and environmental hazards.	<ul style="list-style-type: none"> • Initial attachment to Local HPU compatible with FPH guidelines*, including introductory visit to Environmental Health Dept • Part A MFPH (or future Diploma in HP) 	<ul style="list-style-type: none"> • Three month attachment at Local HPU in line with FPH guidance (2003).
1.4 Basic understanding of communicable disease process.	<ul style="list-style-type: none"> • On GMC/NMC/GDC Register (or demonstration of equivalent training and assessment) or • Attended basic training on biological + clinical basis of HP compatible with FPH guidelines* 	<ul style="list-style-type: none"> • If not on GMC/NMC/GDC register, completion of tailored learning programme**.

<p>1.5 Awareness of the general principles of health protection response, including outbreak and incident management and the roles of others.</p>	<ul style="list-style-type: none"> • Part A MFPH (or future Diploma in HP) • Induction on local outbreak plan, chemical incident plan and emergency response arrangements 	<ul style="list-style-type: none"> • Three month attachment at Local HPU in line with FPH guidance (2003) • Supervised first on-call in daytime
<p>1.6 Familiarity with guidelines and plans for most common problems:</p>	<ul style="list-style-type: none"> • National meningococcal guidelines and local outbreak/incident plans discussed in induction programme for new SpTs/SpRs • Part A MFPH (or future Diploma in HP) 	<ul style="list-style-type: none"> • Three month attachment at Local HPU in line with FPH guidance (2003) • Further local induction with each geographical change of location
<p>1.7 Awareness of and access to other local and national policies, plans and guidelines or regularly updated on-call pack covering guidance on potential on-call scenarios.</p>	<ul style="list-style-type: none"> • Provision and demonstration of on-call pack or alternative resource 	
<p>1.8 Ability to use on-call communication aids and any relevant databases (or how to access them).</p>	<ul style="list-style-type: none"> • Hands on demonstration in induction 	

* FPH guidance on what should be covered in the *initial attachment to an HPU* for all SpRs/SpTs and what should be covered in *basic training on the biological and clinical basis of health protection* for non-clinical SpTs will follow.

** See FPH guidance on Training in Health Protection for Specialists in Public Health, section 2 (p4-6), June 2003.

An assessment of the competencies in Annex A that are not covered by the Part A exam should be carried out by the Trainer. Guidance on this assessment will follow from the FPH.

Annex B: Educational Requirements for undertaking:

UNSUPERVISED PUBLIC HEALTH ON-CALL DUTIES (Equivalent to DPH/CPHM) (Additional to First on-call competencies)

Requirements	Demonstration of minimum standard	Further development of competence***
<p>2.1 Familiarity with the principles and practice of being on-call, including</p> <ul style="list-style-type: none"> • professional obligations • legal issues • professional responsibility to ensure appropriate public health action taken in response to all incidents. 	<ul style="list-style-type: none"> • Membership of a professional register (GMC/NMC/GDC/UKVRPH) • Experience of non-residential professional out of hours duties (minimum of 50 separate days: see note below) • Formal training on legal issues <p>(Note: eg, a weekday evening and night session could count as 1 day and weekend days could be counted separately)</p>	<ul style="list-style-type: none"> • Experience of public health on-call, including weekday nights, weekends, bank holiday and annual/sick leave cover (minimum 25 separate days, including 12 in last 2 years) • Completed training programme in public health • Experience of supervising SpRs/SpTs • Experience of using legal powers of Proper Officer or update in last 5 years
<p>2.2 Ability to perform a risk assessment of a problem, decide whether public health action is necessary and decide appropriately whether action is required out of hours.</p>	<ul style="list-style-type: none"> • Involved in assessment of 20 enquiries out of hours 	<ul style="list-style-type: none"> • Involved in assessment of 40 enquiries (including 20 out of hours) in last 4 years. • Able to demonstrate appropriateness of response by reflective learning, peer audit, feedback from trainer/supervisor or examination.
<p>2.3 Ability to effectively exercise the local on-call procedures, including:</p> <ul style="list-style-type: none"> • Administration of chemoprophylaxis • Handover before and after on-call 	<ul style="list-style-type: none"> • Induction in local arrangements • Used arrangements out of hours in this or another locality 	<ul style="list-style-type: none"> • Used arrangements out of hours in this locality
<p>2.4 Experience of practicalities of working with others out of hours, particularly:</p> <ul style="list-style-type: none"> • HPA • Microbiology • Environmental Health 	<ul style="list-style-type: none"> • Experience of working out of hours with HPA (or equivalent organisation in devolved administrations), microbiology and EHOs in any locality • Awareness of contact arrangements in this locality 	<ul style="list-style-type: none"> • Experience of working out of hours with HPA, microbiology and EHOs in this locality • Experience of working with Emergency Services, Clinicians (ID/GUM), Infection Control, TB control staff, Environment Agency and HSE

Requirements	Demonstration of minimum standard	Further development of competence***
<p>2.5 Up to date knowledge of relevant aspects of natural history, epidemiology, clinical presentation, laboratory diagnosis and methods of transmission and control of common hazards that may require public health intervention out of hours, including:</p> <ul style="list-style-type: none"> • Meningococcal disease and meningitis. • Gastrointestinal infections, including E coli O157. • Respiratory infection, including Legionella and TB • Blood-borne viruses (HBV, HCV, HIV) • Infections requiring prophylaxis/advice, (eg pertussis, hepatitis A) • Most common chemical/environmental hazards (asbestos, CO, smoke, mercury, ammonia, chlorine) • Other hazards with increased local/regional occurrence 	<ul style="list-style-type: none"> • MFPH (or future Diploma) or assessed module from MPH that covers FPH curriculum for health protection (or on GMC Specialist Register for medical microbiology or clinical infectious diseases and have suitable training/experience in non-infectious environmental hazards) • Training/updating in each of these areas during last 5 years. 	<ul style="list-style-type: none"> • Updating in each of these areas during last 3 years (certificate in CPD file) • Training and updating to understand how clinical diagnoses relevant to health protection are made from clinical symptoms and signs and on issues in prescribing appropriate prophylactic drugs and immunisations, including awareness of contraindications
<p>2.6 Ability to interpret national guidelines and local policies for the most common scenarios that present on-call and to effectively co-ordinate public health action. Includes single cases of infections listed in section 2.5.</p>	<ul style="list-style-type: none"> • Dealt with 3 cases of meningococcal infection (including 1 out of hours) in last 4 years****. • Dealt with 1 case in each of the other categories (NOT each individual organism) in section 2.5, including 2 separate categories out of hours • Dealt with case of E. coli O157, Legionella and HBV (either within or out of hours) <p>Note: in all cases in sections 2.6 to 2.9, number of cases/incidents required as experience can include cases/incidents dealt with under the supervision of a trainer.</p>	<ul style="list-style-type: none"> • Dealt with 6 cases of Meningococcal infection (including 3 out of hours) in last 4 years****. • Dealt with each organism/chemical listed in section 2.5 (preferably in the last 4 years, either within or out of hours) • Dealt with E. coli O157, Legionella and HBV/needlestick out of hours in last 4 years. • Able to demonstrate appropriateness of response by reflective learning, peer audit, feedback from trainer/supervisor or examination.

Requirements	Demonstration of minimum standard	Further development of competence***
<p>2.7 Awareness of the basic principles of control and sources of advice and support (particularly out of hours) for serious, less common public health problems that may present out of hours, including:</p> <ul style="list-style-type: none"> • Imported infections (eg VHF, diphtheria, rabies exposure, possible SARS/avian flu) • Exposure of particularly vulnerable groups (e.g. chickenpox in immunosuppressed/neonates; rubella in pregnancy) • Exposure to blood-borne viruses or TB in community or health care settings (including needlestick injuries and potential lookback exercises) • Potential public health emergencies (eg food-borne botulism) • Potential deliberate release eg 'White powder' exposures • Exposure to contaminated water • Acute exposure to chemical hazards • Urgent travel health enquiries • Major emergencies (eg floods, explosions) • Diseases/hazards that have emerged as public health problems since these requirements were drafted and current 'hot topics'. 	<ul style="list-style-type: none"> • MFPH (or new Diploma) or assessed module in MPH that covers FPH curriculum (or on GMC Specialist Register for medical microbiology or clinical infectious diseases and have suitable training/experience in non-infectious environmental hazards). • Training/updating within last 5 years on basic principles and sources of advice and support. • Participated in management of <ul style="list-style-type: none"> - needlestick injury - chemical exposure • Participated in actual or simulated management of <ul style="list-style-type: none"> - rabies exposure - white powder 	<ul style="list-style-type: none"> • Updating within last 3 years on basic principles and sources of advice and support. • Participated in actual management of <ul style="list-style-type: none"> - white powder - rabies exposure - as many of the other scenarios as possible • Participated in out of hours management of: <ul style="list-style-type: none"> - needlestick injury - chemical exposure - as many of the other scenarios as possible • Regularly updated on local incidence and prevalence of relevant infections • Able to demonstrate appropriateness of response by reflective learning, peer audit, feedback from trainer/supervisor or examination.
<p>2.8 Understanding of the principles and practice of management of outbreaks and incidents.</p>	<ul style="list-style-type: none"> • Participated in management of both community outbreak and chemical incident 	<ul style="list-style-type: none"> • Participated in management of community outbreak and chemical incident out of hours • Participated in audit/review of outbreak/incident
<p>2.9 Ability to effectively co-ordinate the public health investigation (with appropriate expert advice) and control of (relatively) common local outbreaks and incidents out of hours, including:</p> <ul style="list-style-type: none"> • Potentially linked cases of meningococcal disease***** • Potential community outbreaks of GI Illness • Chemical incidents 	<ul style="list-style-type: none"> • Participated in management of all 3 scenarios • Dealt with at least one of these scenarios out of hours • Experience or training in chairing multi-agency meetings 	<ul style="list-style-type: none"> • Participated in all 3 scenarios out of hours • Dealt with at least one of these scenarios out of hours in last 4 years • Experience of leading/chairing incident control team

Requirements	Demonstration of minimum standard	Further development of competence***
<p>2.10 Ability to contribute effectively to the control of:</p> <ul style="list-style-type: none"> • Hospital outbreaks/incidents • Radiological incidents • Major emergencies • Deliberate release incidents 	<ul style="list-style-type: none"> • Familiarity with local contingency plans • Attended training on each of the four types of incident (could include supervised involvement in actual incident). • Experience of working with JHAC/HAT and Emergency Services in actual or simulated emergency 	<ul style="list-style-type: none"> • Participated in management of major emergency • Participated in management of hospital outbreak/incident • Participated in actual or simulated incident for all 4 scenarios in last 5 years • Training in principles of infection control
<p>2.11 Ability to communicate effectively on public health issues, including:</p> <ul style="list-style-type: none"> • Preparing appropriate press releases out of hours • Giving effective media interviews • Communicating directly with public. 	<ul style="list-style-type: none"> • Awareness of out of hours arrangements • Received media training • Involved in preparation of press release • Attended relevant public meeting (e.g. parents in a school with meningitis) 	<ul style="list-style-type: none"> • Personally prepared press release • Addressed relevant public meeting • Given media interview, including feedback on performance

*** This column is not compulsory, but is given as guidance in the pursuit of excellence for training/CPD.

**** In countries where meningococcal infection is significantly less common, can substitute 'x cases of meningococcal infection' with 'x cases of severe infection with potential for person to person spread, one of which should be meningococcal infection.'

***** or, in countries, where meningococcal infection significantly less common, another serious infection with potential for person to person spread.

Practical issues for on-call rotas:

This FPH guidance is concerned with defining educational standards, rather than the practicalities of providing an out of hours service, which will differ in different localities and is the responsibility of the local NHS working with the Health Protection Agency (or equivalent). However on-call providers will need to note the following:

- Current DH guidance in England is that *“HAs should ensure that adequate arrangements exist to provide a 24 hour on-call service of suitably trained medical staff able to deputise for the CCDC. Although junior medical staff may participate in the rota, consultant advice must always be available”* (HSG(93)56). Public health on call rotas in England should therefore ensure that advice is always available from a suitably qualified medical Consultant.
- In Scotland, a nominated Designated Medical Officer is required to exercise certain legal powers.
- In England and Wales, Proper Officers (including deputies) for exercising Local Authority powers need to be formally appointed by each LA: however, the Public Health Act (1984) and Regulations (1988) do NOT specify that the Proper Officer has to be medically qualified.
- HPA has statutory health protection functions for England and PCT DsPH have responsibility for local population health protection. The PCT DPH needs the managerial ability to mobilise the NHS at a higher level in the event of a major emergency.