

**Public Health Specialty Training
in Health Protection**

*A guide to current regional training placements
and registrar experiences*

FPH Health Protection (Education and Training) Special Interest Group
March 2020

Next review: May 2021

INTRODUCTION

The Faculty of Public Health (FPH) Public Health Specialty Training Curriculum 2015 details the minimum requirements for public health registrars' training in health protection. This includes undertaking a minimum three-month whole-time equivalent placement with a health protection team or consultant in communicable disease control during Phase 1 of training, where registrars will be expected to develop skills in the investigation and management of health protection issues.

During Phase 2 of specialty training, registrars are able to direct their training to help support the development of additional or specialist expertise in an area of public health, including health protection. This may include longer-term placements with local health protection teams or placements with regional or national specialist centres.

Due to the variation in delivery of health protection across the UK, the opportunities for registrars may vary by training region. In addition, such opportunities may be restricted by geographical availability and the ability for individual registrars to relocate to regional or national locations.

PURPOSE OF THIS HANDBOOK

This handbook has been developed by the Health Protection (Education and Training) Special Interest Group (SIG) to help support registrars in identifying the current opportunities for enhanced training in health protection across the different training regions. It is a live document and will be reviewed on an annual basis. If any changes to training opportunities are reported to the SIG in the intervening period, the document will be updated sooner to reflect these.

In addition, this document aims to highlight the similarities and differences in the organisation and delivery of training in health protection to help support training leads and training programme directors when reviewing training structures.

Finally, where relocation to regional or national specialist centres may not be possible, it aims to identify the opportunities available for registrars to undertake health protection projects or workstreams on a flexible working or remote working basis. It is hoped that this will not only increase the training opportunities for the specialty registrar workforce but also provide additional capacity to health protection teams/centres.

STRUCTURE OF THIS HANDBOOK

The following pages include examples of registrar experiences within each named public health training programme, including details of 'typical', established pathways to develop specialist expertise in health protection.

Where possible, contact details for lead Educational Supervisors for training placements and links to FPH National Treasure training placements are included for further details where appropriate (see Appendix II).

East Midlands

Aspect of training	Local arrangements
<i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i>	4 months' (full-time equivalent) placement with the local acute health protection team, passing Part A and completing on-call throughout the rest of training.
<i>What are the arrangements for registrar involvement in out of hours health protection work?</i>	<ul style="list-style-type: none"> ● Registrars act as Tier 1 of a 3 tier out of hours rota undertaking a maximum of 1 in 9 shifts ● Registrars must have been successful at MFPH Part A exam, have completed their 4 month health protection placement and passed an assessment for joining the out of hours rota <p>Registrars are not able to 'opt-out' of the out of hours rota at present</p>
<i>What arrangements are in place to support registrars in keeping up to date with changes in local SOPs, national guidelines etc. particularly in relation to OOH work?</i>	Twice yearly academic day updates from a CCDC and information shared via the StR email group. There is also a secure online portal ("Sharepoint") for new documents and StRs are invited to regular PHE CPD sessions.
<i>What are the requirements for demonstrating competence in learning outcome 6.9?</i>	<ul style="list-style-type: none"> ● LOS 6.9 is considered to be achieved at the completion of the specialty training programme once all of the above plus significant out-of-hours work has been signed-off. <p>There is no current minimum number of cases/enquiries etc. to meet this learning outcome but registrars are encouraged to maintain a log book of all activity which is reviewed by the training lead on a periodic basis</p>
<i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i>	<ul style="list-style-type: none"> ● There is no standard training route however registrars usually arrange to be based at the PHE East Midlands Centre for their final 6-12 months of training and are encouraged to lead on incidents and outbreaks and the Acute Response Centre ● Placements may also include FES and CRCE <p>Working patterns are generally flexible with the Centre supporting less-than-full-time and remote working arrangements</p>
<i>What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?</i>	<ul style="list-style-type: none"> ● Registrars have undertaken the following placements: ● Regional FES ● PHE CRCE <p>Field Epidemiology Training Programme (out of programme)</p>

East of England

Aspect of training	Local arrangements
<i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i>	<ul style="list-style-type: none"> ● Minimum of 3 months' health protection placement with the East of England health protection team (based on two sites) ● Monthly refresher training days on the acute desk
<i>What are the arrangements for registrar involvement in out of hours health protection work?</i>	<ul style="list-style-type: none"> ● Following Part A pass, completion of the relevant LOs and a formal safe on-call assessment, registrars participate in the OOH rota ● Registrars are able to 'opt-out' of OOH duty or remain on for the duration of training once they have achieved competency in learning outcome 6.9 (see Appendix I) ● The EoE 1st on-call system is currently under review, with the proposed merging of 3 separate rota areas into one
<i>What arrangements are in place to support registrars in keeping up to date with changes in local SOPs, national guidelines etc. particularly in relation to OOH work?</i>	<ul style="list-style-type: none"> ● National briefings and updated SOPs are all emailed to the on-call registrars. ● Bimonthly on-call teleconference run by the registrars. ● An annual refresher training day for all on-call practitioners.
<i>What are the requirements for demonstrating competence in learning outcome 6.9?</i>	<ul style="list-style-type: none"> ● The East of England Training in Health Protection policy provides a guide to LO 6.9 sign off.
<i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i>	<ul style="list-style-type: none"> ● Health protection specialist training in the East of England is available for two registrars per year following a panel interview. There is no predetermined rotation for this training. ● The programme is detailed in the East of England Training in Health Protection policy and may include placements with PHE NIS, PHE CRCE, a microbiology laboratory, FES or work with national teams from within the training region

What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?

- Registrars have recently undertaken placements with the following teams:
 - Local health protection team
 - Regional screening and immunisation teams
 - Regional FES team
 - Regional PHE/hospital microbiology laboratories
 - PHE NIS, Colindale
 - PHE CRCE
 - Royal Free Hospital, London

London, Kent, Surrey and Sussex

Including: Kent (Ashford), Surrey and Sussex (Horsham), North East and North Central London (Blackfriars), North West London (Colindale) and South London (Skipton House)

Aspect of training	Local arrangements
<i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i>	<ul style="list-style-type: none"> ● Generally a 2 week induction is followed by a 4 month whole-time equivalent placement with the acute health protection team (to include acute response work; strategic work and opportunities to gain experience with partners e.g. environmental health officers, emergency planners etc.)
<i>What are the arrangements for registrar involvement in out of hours health protection work?</i>	<ul style="list-style-type: none"> ● Registrars are expected to have been in the programme for 12 months and to have passed MFPH Part A ● Registrars participate fully in the first tier of the OOH rotas in all five HPTs on the rota at a frequency of one in nine or less. ● Competence to start on the supervised tier of the out of hours rota is assessed through completion of the learning outcomes documented in the 2015 curriculum. A scenario assessment may be conducted. ● In addition there should be a preparation meeting for OOH work. ● Once the acute placement has been completed, registrars work in the duty room for 1 day each month for clinical governance and to maintain skills and knowledge
<i>What are the requirements for demonstrating competence in learning outcome 6.9?</i>	<p>This is assessed towards the end of training and should be signed off in readiness for the final ARCP. It should be assessed through workplace based assessment of in and out of hour work</p>
<i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i>	<p>Yes – in discussion with the TPD lead for Health Protection. A tailored programme will be developed but will generally include the following:</p> <ul style="list-style-type: none"> ● PHE NIS, Colindale <ul style="list-style-type: none"> ○ Minimum 4 month placement (whole time equivalent) ○ Includes acute and project based work such as outbreak investigation, writing national guidance, data analysis, literature reviews and duty doctor role ● PHE CRCE London <ul style="list-style-type: none"> ○ Minimum 4 month placement (3 months at Extreme Events and 1 month with the Chemicals team) (whole time equivalent)

	<ul style="list-style-type: none"> ○ Includes acute chemical response work and project based work such as writing cold weather/heatwave/flooding planning documents and monitoring inbox and enquiries (e.g. responding to parliamentary questions and ad hoc requests) ● PHE FES <ul style="list-style-type: none"> ○ Minimum 4 month placement (whole time equivalent) ○ Project based work such as analysing data, report writing, inputting into national guidance and acute work responding to regional outbreaks (undertaking cohort/ case control studies) ● Senior placement with local PHE Health Protection Team – usually towards the end of training and to include three months acting up role. <p>All placements may facilitate some remote working on a case-by-case basis but there are benefits to physical presence on site to maximise the opportunities on offer</p>
<p><i>What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?</i></p>	<ul style="list-style-type: none"> ● Registrars have undertaken the following placements/activities: <ul style="list-style-type: none"> ○ Toxicology placement (PHE linked/stand-alone) ○ Regional screening and immunisation team placement ○ PHE Global Health Team ○ Department for International Development ○ Medecins Sans Frontieres ○ Placement in the Emergency Response Department, PHE Porton Down ○ Diploma in Health EPRR (available nationally, provided by Loughborough University with NHS funding available on application) ○ Out of programme - Field Epidemiology Training Programme ○ Out of programme - EPIET

North East

Aspect of training	Local arrangements
<p><i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i></p>	<ul style="list-style-type: none"> ● Registrars undertake a WTE 3-month placement with the health protection team, usually after completing the MSc in Public Health and after the first sitting the MFPH Part A exam. There is a formal assessment at the end of the placement to ensure that StRs have reached the appropriate level of competence, and extended / repeat attachments can be arranged for those who have not reached the required standard.
<p><i>What are the arrangements for registrar involvement in out of hours health protection work?</i></p>	<ul style="list-style-type: none"> ● Registrars join the out of hours rota when 3 criteria are met: <ol style="list-style-type: none"> 1. Passing Part A exam 2. Completing WTE 3-month placement, and 3. Completing formative assessment ● StRs typically continue on the OOHs rota until the end of their training. They are provided with PHE laptops and HPZone access. There are arrangements in place with HEE to allow trainees to reclaim the cost of top-ups for a dedicated pay as you go on call mobile. ● Registrars must complete a week-long refresher session with the health protection team each year.
<p><i>What arrangements are in place to support registrars in keeping up to date with changes in local SOPs, national guidelines etc. particularly in relation to OOH work?</i></p>	<ul style="list-style-type: none"> ● HPT maintain a dedicated folder of key documents for on-call work that is accessible to trainees and regularly updated. ● A member of HPT is invited to attend monthly trainee meetings and has a standard agenda item. ● Trainees have a standard agenda item to discuss on-call work after the main business is concluded. ● Trainees have access to PHE laptops and receive HPT updates sent by email and via staff bulletins.
<p><i>What are the requirements for demonstrating competence in learning outcome 6.9?</i></p>	<ul style="list-style-type: none"> ● This is assessed towards end of training by HP Supervisor to ensure that a broad range of things have been done on call. Assessment is based on a query of HPZone records, as StRs are no longer expected to maintain a health protection on call logbook.

<p><i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i></p>	<ul style="list-style-type: none"> ● No standard pathway is ‘marketed’ for registrars, but registrars can do a senior attachment in health protection of 6-12 months, and a custom programme will be put together to meet their individual needs (usually including e.g. time spent in relevant laboratories and at Colindale).
<p><i>What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?</i></p>	<ul style="list-style-type: none"> ● Registrars may work with staff in Environmental health teams depending on the arrangements in each Local Authority, e.g. working on air quality monitoring. ● DsPH are actively encouraged to get StRs placed in their LA involved in OCTs etc. relating to outbreaks in their LA area. ● There are opportunities to participate in site visits to laboratories and screening programmes. ● In the full-time pathway, registrars spend their third year on rotation with PHE and can undertake work with the Screening and Immunisations team. ● Some registrars become involved in defined health protection projects as part of their portfolio of work while formally attached to another location (e.g. undertaking health protection audits or strategic pieces of work).

North West

Including: Cheshire and Merseyside, Cumbria and Lancashire and Greater Manchester

Aspect of training	Local arrangements
<p><i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i></p>	<ul style="list-style-type: none"> ● 3 month mandatory placement with a local health protection team. STRs are usually required to have passed Part A and completed the MPH. Placements are usually arranged towards the end of ST2 or during ST3. ● The North West HPT has offices in: Greater Manchester (central Manchester); Cheshire and Merseyside (Liverpool); and Cumbria and Lancashire (Preston). Registrars are based a 1 of the 3 local offices on the on-call rota for the zone they are placed in.
<p><i>What are the arrangements for registrar involvement in out of hours health protection work?</i></p>	<ul style="list-style-type: none"> ● Trainees in the North West are required to undertake on-call duties for 15 months at a frequency of 1 in 9. ● Before beginning on-call trainees must have completed the Foundation On-call training course and passed Part A. They must also have completed sufficient of their 3 month health protection placement to have been deemed competent.
<p><i>What are the requirements for demonstrating competence in learning outcome 6.9?</i></p>	<ul style="list-style-type: none"> ● Assessment by educational supervisor when on call completed. There is no formal assessment for this – an educational supervisor signs an StR off as competent for the on-call rota based on discussion and portfolio evidence.
<p><i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i></p>	<ul style="list-style-type: none"> ● Registrars may undertake a 2-year health protection placement based at one of the 3 local health protection teams. This opportunity is advertised annually and candidates are invited to interview for the post (The number of posts each year depends on availability at each office. There is capacity for 2 WTE StRs at each office (6 in total for the NW)). ● These may vary in format/content based on a registrar’s specific interests.
<p><i>What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?</i></p>	<ul style="list-style-type: none"> ● In addition to the experience offered to all registrar in the mandatory 3 month post, most extended opportunities are available within the 2 year old. The mandatory placement focuses mostly on gaining experience of reactive work in the Acute Response Centre/duty desk.

	<ul style="list-style-type: none"> ● Within the 2 year post, there are opportunities for more extensive Health Protection work. Registrars have undertaken the following as examples: <ul style="list-style-type: none"> ○ Strategic project work - to support development of technical expertise and develop leadership skills eg support to the Ebola response, outbreak management, development of TB strategy, reviews of local neonatal BCG policies, local viral hepatitis strategy etc. ○ Experience working with partner agencies eg. <ul style="list-style-type: none"> ▪ Placement with PHE CRCE (e.g. 3 months) ▪ Placement with PHE laboratory (e.g. either a short or longer 3 months placement) ▪ Placement with FES (either to enable completion of a project or for a period of time, e.g. 3 months) ○ Opportunities to link with national Health Protection Teams
<p><i>Out of hours updates</i></p>	<ul style="list-style-type: none"> ● On call update sessions delivered within the 3 teams plus NW wide joint training sessions (not on call specific) run monthly.

Northern Ireland

Health protection training delivered at the Public Health Agency (PHA)

Aspect of training	Local arrangements
<i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i>	<ul style="list-style-type: none"> ● A 3 month health protection placement is undertaken in ST2 involving 3 days per week in the health protection duty room as well as health protection project work ● Participation in the duty room continues throughout training – minimum 1 shift per month
<i>What are the arrangements for registrar involvement in out of hours health protection work?</i>	<ul style="list-style-type: none"> ● Registrars participate in the out of hours rota throughout their training on a 2 tier system (Consultant tier 2), usually on a 1 in 10 shift pattern ● Prior to joining the rota registrars must complete: <ul style="list-style-type: none"> ○ 2 month health protection induction programme ○ On-call assessment usually at around 2-3 months into training ○ Evidence to support competence in LOS 1.2, 4.2, 6.1-6.6 and 9.2 ● There is no 'opt-out' option for registrars at present although special circumstances can be discussed with the training programme director and training body (NIMDTA). ● Only registrars from medical backgrounds are recruited into PH Specialty training at present who will have experience of covering on call rotas in other specialties, however there are plans in place to open the programme to applicants from backgrounds other than medicine.
<i>What arrangements are in place to support registrars in keeping up to date with changes in local SOPs, national guidelines etc. particularly in relation to OOH work?</i>	<ul style="list-style-type: none"> ● Trainees are encouraged to attend the monthly health protection staff meetings and the daily briefings ● There are regular health protection CPD sessions provided in PHA ● Health protection updates are a standing item on the monthly trainee meetings ● Health protection resources and SOPs are maintained on a SharePoint site to which trainees have access
<i>What are the requirements for demonstrating competence in learning outcome 6.9?</i>	<ul style="list-style-type: none"> ● The recommendations from the FPH 2010 specialty training curriculum are still utilised (minimum case requirements) with assessment by educational supervisors and support from the health protection

	<p>training lead if the educational supervisor does not work in health protection</p>
<p><i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i></p>	<ul style="list-style-type: none"> ● There is no standard set of placements outside of those undertaken in the Public Health Agency ● Educational visits to the public health/microbiology laboratories and Northern Ireland Water sites are organised to further understanding of the key activities in these settings
<p><i>What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?</i></p>	<ul style="list-style-type: none"> ● Registrars have undertaken the following: <ul style="list-style-type: none"> Outside of Northern Ireland <ul style="list-style-type: none"> ○ Two registrars were selected in a competitive process for a secondment in the HPA, Colindale and ECDC, Stockholm, during the London Olympics 2012 ○ One registrar undertook a placement at Colindale and travelled to Sierra Leone with PHE as part of the response to the Ebola outbreak in West Africa ○ Several registrars have attended the PHE Outbreak Investigation training course in Colindale and found this useful Projects within Northern Ireland (beyond management of single cases/enquiries) <ul style="list-style-type: none"> ○ Outbreak management (ranging from small e.g. single nursing home to larger regional outbreaks) ○ Planning and participating in emergency preparedness exercises ○ Developing standard operating procedures ○ Work with multi-agency partners e.g. police, fire service, water services, environmental health ○ Involvement with planning, delivery and evaluation of vaccination programmes ○ Health protection support to Department of Health in Northern Ireland including development of Antimicrobial Strategy and review of Public Health Legislation ○ Work with marginalised groups to provide information and promote access/uptake of services such as testing/vaccination, generally along with health and social care Trusts or voluntary organisations e.g. rough sleepers, Roma community

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| | <ul style="list-style-type: none">○ Audits of health protection practice |
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Scotland

Aspect of training	Local arrangements
Core requirements for training in Health Protection for all Registrars	<p>Currently between 3-6 months' WTE acute health protection placement at the beginning of training and 3 months' health protection at a senior level in ST5, pre-CCT. Often trainees opt to do more. Trainees in rural or remote boards often take an out of board placement with a larger NHS board HP Team, in order to gain sufficient HP experience.</p> <p>Note that Consultant posts in NHS Boards in Scotland normally require on call commitments, and require a minimum of 6 months' health protection experience even if non-health protection posts.</p>
What are the health protection out of hours arrangements for Registrars?	<p>Registrars undertake supervised on call within one of the territorial NHS Boards in Scotland, usually their host NHS Board, but if undertaking additional training in a larger NHS board, on-call could be within the larger board. Registrars contribute to the first on call rota with supervision provided by a Consultant (who may be non-health protection) who acts as the second on call. Most registrars in Scotland stay on the OOH rota until CCT. Contributing to the OOH rota when on attachment outside the home board can be negotiated.</p>
What are the requirements for demonstrating competence for FPH 2015 LOS 6.9 in your region?	<p>At time of writing in Scotland no one has yet CCT'd on the 2015 curriculum. The current guidance can be viewed at http://www.nes.scot.nhs.uk/media/3132/Training%20On-Call.pdf This is currently under review, and will be finalised following changes to the national out of hours service provision.</p>
<p>Do Registrars interested in Health Protection follow a standard set of placements to provide additional training in Health Protection?</p> <p>If yes, please describe these placements.</p>	<p>There is not a standard set of placements provided for registrars interested in seeking additional health protection experience in Scotland. However, interested registrars often complete an attachment with our national agency, Health Protection Scotland (HPS).</p>
What other opportunities have Registrars in your region taken up to gain additional training in Health Protection?	<p>In recent years, several registrars have taken up placements at Health Protection Scotland at various stages in training, usually after completing the MFPH Part B exam. One registrar from Scotland has taken up a placement at PHE Colindale for 3 months in ST5. Other registrars have undertaken attachments in different territorial health boards to gain wider experience than available in their host board. At times of national health protection events (e.g. a large national outbreak or large-scale patient notification exercise) a call-out may go out to all registrars inviting</p>

them to be involved on a short-term basis with that specific event.

One case study of an attachment at Health Protection Scotland is included below:

Summary of the placement – 6 month attachment pro rata'd over 10 months spent at Health Protection Scotland working with the Environmental Public Health team. Experience included attending a variety of strategic level environmental meetings with partner agencies. Participation in answering environmental queries, contributing to EPH incident management, undertaking a literature review pertinent to a specific incident, contribution to guidance development to assist Boards. Other opportunities included visits to a variety of related partner agencies including SEPA, PHE Radiation Protection Services etc.

Contact details for Educational Supervisors –

Dr Eleanor Anderson

Dr Jim McMEnamin

Some examples of work that has been undertaken by StRs-

- Literature review of health impact of carbon dioxide from coal mines and evidence of effective mitigation measures- Paper submission to journal to follow.
- Input to dynamic assessment of air quality meetings held through PHE and met office from Scottish perspective
- Guidance note on health impact dealing with asbestos in buildings.

Pattern of working – Ability to work at home but better to be on site to gain full experience and for quick identification of serendipitous opportunities. Happy for part time hours.

South West

Aspect of training	Local arrangements
<p><i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i></p>	<ul style="list-style-type: none"> ● Registrars undertake the mandatory acute health protection placement normally between 3 and 4 months 1.0wte but can be increased subject to learning needs of registrar. ● Registrars advised to complete 3 day blocks quarterly to further accrue acute duty room experience following their initial placement to maintain competence ● A checklist for health protection training to further understand the wider system of health protection has been developed and is embedded in the Training Policy document. This is introduced to registrars at their induction. Educational Supervisors in all settings are expected to support registrars work through this check-list.
<p><i>What are the arrangements for registrar involvement in out of hours health protection work?</i></p>	<ul style="list-style-type: none"> ● Registrars, when they are at a point of signing off the relevant curriculum competences participate in a further assessment to ensure 'on-call readiness' (detailed in the Health Protection Training Policy) ● Registrars form part of a 2 tier out of hours rota (approx. 1 in 9 frequency of duties) which is compliant with the medical contract. ● Registrars are not expected to stay on the rota after CCT. ● Once LOS 6.9 has been achieved (see details below) registrars need to discuss the option for staying on the OOH rota based on additional training needs / career goals, otherwise they will automatically come off..
<p><i>What arrangements are in place to support registrars in keeping up to date with changes in local SOPs, national guidelines etc. particularly in relation to OOH work?</i></p>	<ul style="list-style-type: none"> ● Twice-yearly OOH training update days run by the PHEC ● Ongoing ARC work (3 day blocks quarterly) ● Minimum twice yearly 1:1 sessions with the health protection supervisor post training. ● National briefings, changes to local SOPs and any other important information is sent out to registrars via email
<p><i>What are the requirements for demonstrating competence in learning outcome 6.9?</i></p>	<ul style="list-style-type: none"> ● Agreed process as follows: <ul style="list-style-type: none"> ○ Undertake a minimum of 40 on call sessions as first responder and demonstrate a breadth of

	<p>out of hours health protection activity and appropriate response through their log-book</p> <ul style="list-style-type: none"> ○ Worked in the acute response centre to further develop competence and meet learning needs at least 3 days/quarter ○ Demonstrated additional CPD in health protection (e.g. attending on call training days/ relevant conferences/ contributing to or appraising and reporting on relevant papers) ○ Have maintained a reflective log book and met with the health protection trainer at least twice per annum to review this over the period they are on call ○ Worked through the check-list and can demonstrate understanding of the system of health protection outside of PHE.
<p><i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i></p>	<ul style="list-style-type: none"> ● The training policy outlines arrangements for those wishing to specialise in health protection. ● Registrars interested in specialising in health protection usually aim to complete 12 months of specialist placements at the end of training (e.g. 6 months with the local health protection team and 3-6 months with FES/Screening and Immunisation etc.). Registrars wishing to do this must have signed-off all learning outcomes before undertaking specialist training.
<p><i>What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?</i></p>	<ul style="list-style-type: none"> ● Registrars have undertaken the following placements <ul style="list-style-type: none"> ○ Various PHE placements in the last 12 months to gain specialist health protection training as detailed above ○ PHE Colindale – 6 week full-time placement undertaking project work including work with the Emerging Infections and Zoonoses team, leading an investigation and review of West Nile Virus, writing national guidance and epidemiological analysis of HES data, setting up surveillance systems for West Nile Virus

Thames Valley

Aspect of training	Local arrangements
<i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i>	<ul style="list-style-type: none"> ● Registrars complete a 3-4 month placement with the health protection team, involving acute duty room experience and project work ● MFPH Part A and B preparation ● MSc in Public Health ● Quarterly health protection CPD days
<i>What are the arrangements for registrar involvement in out of hours health protection work?</i>	<ul style="list-style-type: none"> ● Registrars will have completed their 3 month acute health protection placement and have met the educational requirements for undertaking supervised out of hours work (portfolio review to include experience of managing minimum set of health protection scenarios) ● Success at MFPH Part A is also required prior to joining the out of hours rota ● Registrars form part of a 2 tier out of hours rota, typically undertaking 2 weeknight shifts per month and 1 weekend shift every 3 months ● 5 day acute response 'refresher' sessions are completed every 6 months until CCT ● Attendance at quarterly health protection CPD days is required
<i>What arrangements are in place to support registrars in keeping up to date with changes in local SOPs, national guidelines etc. particularly in relation to OOH work?</i>	<ul style="list-style-type: none"> ● Quarterly health protection CPD ● Email alerts regarding updated SOPs ● Registrars on call have access to the PHE health protection shared drive, and therefore the latest version of all SOPs ● Up to date versions of local/national OOH contacts are saved on HPZone
<i>What are the requirements for demonstrating competence in learning outcome 6.9?</i>	<ul style="list-style-type: none"> ● Ideally sign-off in the final year of training (registrars remain on the rota until CCT) ● Registrars should be able to demonstrate management of a breadth of health protection cases/incidents at a senior level (little requirement for consultant/other input as appropriate for the scenario) – review of logbook/ discussion required
<i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i>	<ul style="list-style-type: none"> ● There is no standard set of placements, with selection depending on the registrar's career aspirations and training needs. However, registrars will generally undertake placements with the following local and national teams, ideally over their last 2 years of training:

	<ul style="list-style-type: none"> ○ An extended placement (e.g. 6 months) with the local health protection team, undertaking outbreak investigation, case management and local project work. Usually undertaken in the final year of training. ○ PHE Emergency Response Department at Porton – 3 month placement. ○ PHE Environmental Hazards and Emergencies (EHE) Department – 3 month ‘chemicals desk’ placement. This could potentially be combined with a placement with the CRCE Extreme Events team. ○ FES South East and London – 3-6 month placement gaining experience of surveillance, outbreak investigation and research, mainly in infectious disease-related epidemiology. Projects have included preparing annual HIV reports, outbreak investigations, investigating delayed treatments for TB using surveillance data ○ PHE NIS, Colindale – 3-6 month placement undertaking national level surveillance, outbreak investigation, risk assessment and research
<p><i>What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?</i></p>	<ul style="list-style-type: none"> ● Other opportunities can be considered depending on individual circumstances and aspirations. ● Registrars have also undertaken the following placements: <ul style="list-style-type: none"> ○ Environmental Epidemiology Group, PHE CRCE, Chilton for 3-12 months gaining experience in surveillance, epidemiology and research in environmental epidemiology. Topics include lead poisoning surveillance, carbon monoxide tracking/ surveillance, air pollution, arsenic in water supplies and the health effects of fluoridation national monitoring. ○ UK Cochrane Centre, Oxford – 6-12 month placement undertaking systematic reviews, editorial blogs and promoting the evidence-based medicine agenda with opportunities to pursue infectious disease or environmental hazard related systematic reviews, which would need to be agreed with the relevant Cochrane review groups.

	<p>Remote working is available. This is a national treasure placement</p> <ul style="list-style-type: none">○ ERGO, University of Oxford – 3-12 month placement with the epidemics research group covering a range of projects on epidemic/ outbreak response on emerging and epidemic infections with a global research agenda. Projects have included developing protocols for Ebola vaccine trials, harmonising case assessment/ surveillance questionnaires for standard research e.g. Zika virus <p>Remote and flexible working is likely to be possible</p> <ul style="list-style-type: none">○ Other placements with the PHE Global Health unit, Department of Health, and Department for International Development may also have a health protection focus
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Wales

Aspect of training	Local arrangements
<i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i>	<ul style="list-style-type: none"> ● Minimum of 3 months but standard 6 months WTE in Health Protection team, typical structure of 3 months acute health protection work within All Wales Acute Response Team (AWARe) and 3 months proactive and/or project work.
<i>What are the arrangements for registrar involvement in out of hours health protection work?</i>	<ul style="list-style-type: none"> ● Successful completion of FPH Part A. ● Local OOH training followed by assessment (examined by 2 Consultants with specialist health protection expertise) ● Participate in out of hours rota until CCT with approximate 1 in 8 duties. StRs are 1st on-call with non-health protection consultant as second on-call for surge capacity and Health protection consultant as 3rd on-call to provide support and advice.
<i>What arrangements are in place to support registrars in keeping up to date with changes in local SOPs, national guidelines etc. particularly in relation to OOH work?</i>	<ul style="list-style-type: none"> ● Monthly 1 hour on-call training – highlight changes to guidelines/SOPs in addition to discussion of cases ● Annual one day health protection training ● Access to Groupware with current SOP's and guidelines updated as required ● Following each on-call session SpRs email an anonymised update to all registrars for peer support and enhanced learning from cases and their management.
<i>What are the requirements for demonstrating competence in learning outcome 6.9?</i>	<ul style="list-style-type: none"> ● Completion of log book of health protection cases managed ● Sign-off by health protection consultant with education and training responsibility for OOH
<i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i>	<ul style="list-style-type: none"> ● No standard structure. Registrars would arrange further health protection placements during later years of training typically including Communicable Disease Surveillance Centre (CDSC) and Environmental Health. Opportunities to 'act up' as CCDC/CHP and to undertake placements outside of Wales

What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?

- Encouraged to undertake 4 week WTE Environmental Health Protection within Health Protection placement – work undertaken includes strategy for reporting of CO and lead poisoning.
- Highly flexible and accommodating to undertake the range of opportunities available outside of the region including:
- Field epidemiology 2 year training as OOPE with PHE Bristol
- CRCE placements
- Welsh National Poisons Unit

Aspect of training	Local arrangements
<p><i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i></p>	<ul style="list-style-type: none"> ● Registrars undertake a 3 month whole-time equivalent acute health protection placement including duty room and project experience ● Registrars have usually completed the MFPH Part A exam before undertaking their placement
<p><i>What are the arrangements for registrar involvement in out of hours health protection work?</i></p>	<ul style="list-style-type: none"> ● Registrars will have met the educational requirements for undertaking supervised out of hours work, including success at MFPH Part A exam, their acute health protection placement and completion of an assessment of competence with the health protection educational supervisor ● Registrars form part of a 3 tier out of hours system undertaking approx. 1 in 9-1 in 10 duties ● Registrars are required to complete 2 weeks of acute duty room 'refresher' training each year, generally split into 1 week each 6 months ● At present, opting out of the out of hours rota is not encouraged with the expectation that registrars will remain on the rota until CCT ● Registrars will leave the rota if undertaking an out of programme placement, although this may be negotiated on a case-by-case basis depending on a registrar's specialist interest
<p><i>What arrangements are in place to support registrars in keeping up to date with changes in local SOPs, national guidelines etc. particularly in relation to OOH work?</i></p>	<ul style="list-style-type: none"> ● PHE Training Lead and a named Health Protection Practitioner email any relevant local/regional/national alerts, briefings, SOP changes to registrars on the OOH rota on an ad-hoc basis ● Registrars must attend bi-monthly out of hours forums where they rotate to present all PHE briefings during the previous 2 months and any key changes in practice are discussed ● Changes in local practice are also highlighted during refresher training sessions ● Registrars are responsible for ensuring they are familiar with these changes/ updates for their OOH sessions
<p><i>What are the requirements for demonstrating competence in learning outcome 6.9?</i></p>	<ul style="list-style-type: none"> ● Registrars must complete refresher/ update training as above and will meet with their health protection educational supervisor to review their activity logbook to demonstrate competence

	<ul style="list-style-type: none"> ● Regular attendance at bi-monthly out of hours forums is required
<p><i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i></p>	<ul style="list-style-type: none"> ● There is no standard set of placements for registrars although they may undertake placements at any of the health protection focussed FPH National Treasures depending on ability to relocate/travel and training capacity at each site
<p><i>What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?</i></p>	<ul style="list-style-type: none"> ● Registrars have undertaken the following placements: <ul style="list-style-type: none"> ○ PHE NIS, Colindale ○ PHE Extreme Events ○ PHE FES ○ Wessex Screening and Immunisation team – 3-6 month placement with project work including reviews of local screening programmes and participation in quality assurance visits, reactive work responding to vaccination enquiries, opportunities for proactive and reactive media work ○ Emergency Response Department, PHE Porton – 6 month whole time equivalent. Flexible and some degree of remote working is possible ○ Extended placement with the local health protection team undertaking outbreak investigation, local project work and development of national PHE guidance depending on availability of projects. Flexible and remote working is possible

West Midlands

Aspect of training	Local arrangements
<i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i>	<ul style="list-style-type: none"> • Registrars are expected to complete 4 months FTE, including a minimum of 2 days per week in the Acute Response Centre (usually 50%) • MFPH Part A no longer a requirement (although most have done this) • 2 week taster sessions available on request (low uptake)
<i>What are the arrangements for registrar involvement in out of hours health protection work?</i>	<ul style="list-style-type: none"> • 1 week in 10 (must include 2 full weekend days) totalling 35 days per year • 3 tier out of hours system with health protection practitioner and then duty Consultant • Out of hours assessment required prior to commencing out of hours, generally no more than 2 weeks prior to end of placement. Educational supervisor must complete paperwork to state competence to undertake out of hours assessment • Registrars must be situated within 1 hour from site • Top-up training is required either 1-2 weeks per year or 1 day per month • Out of programme training registrars are generally expected to travel back to complete out of hours shifts
<i>What arrangements are in place to support registrars in keeping up to date with changes in local SOPs, national guidelines etc. particularly in relation to OOH work?</i>	
<i>What are the requirements for demonstrating competence in learning outcome 6.9?</i>	<ul style="list-style-type: none"> • As above, with the out of hours assessment which is signed-up on successful completion along with regular refresher sessions
<i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i>	<ul style="list-style-type: none"> • No but registrars are recommended to undertake placements with FES, PHE CIDSC and local CRCE • Strongly recommended to gain at 3 months acting-up/locum CCDC experience
<i>What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?</i>	<ul style="list-style-type: none"> • Not aware of any other opportunities routinely, other than National Treasure placements. Historically, some have taken up placements with WHO. Out of programme training/experience is not generally encouraged.

Yorkshire and Humber

Aspect of training	Local arrangements
<p><i>What are the arrangements for achieving the minimum/core requirements for health protection training for all registrars?</i></p>	<ul style="list-style-type: none"> ● Following Part A registrars do a 4 month WTE minimum placement with Yorkshire and the Humber Health Protection Team. ● There is an induction process and meetings with many members of the teams and other PHE teams within the Centre. ● Experience and education on the duty desk is supported by the CCDC on call. ● The Acute Response Desk is based in Leeds but registrars may be based in Leeds, York or Sheffield offices and just travel to the ARC for 1-2 days a week. ● Registrars are encouraged to take on longer term projects within Health Protection that run for the duration of their HP placement too and to 'stay on' after Health Protection to work in another part of the PHE Centre. ● LO 6.1-6.8 are usually signed off during the 4 month placement.
<p><i>What are the arrangements for registrar involvement in out of hours health protection work?</i></p>	<ul style="list-style-type: none"> ● Following Part A pass, completion of the relevant LOs and a formal safe on-call assessment, registrars participate in the OOH rota. ● The OOH covers the whole of Yorkshire and Humber (merged from 3 teams previously) and so is usually quite busy, and is not uncommon to be working most of the shift. ● SpRs are first on-call on the rota with a HPP always on too for advice and surge capacity and a CCDC for educational or further advice. ● The SpR rota covers 2 weekday evenings (1700-0900) each week and Saturday and Sunday (9am-9am) ● It works out around a 1 in 9 but varies depending on numbers on the rota. ● SpRs are not given PHE laptops or phones unless they are still on a PHE placement but can access HPZone using Citrix on their own computers and use Skype for Business, Word and Outlook via Citrix too. ●
<p><i>What arrangements are in place to support registrars in keeping up to date with changes in local SOPs, national</i></p>	<ul style="list-style-type: none"> ● Periodic updates on National briefings and updated SOPs are emailed to the on-call registrars.

<p><i>guidelines etc. particularly in relation to OOH work?</i></p>	<ul style="list-style-type: none"> ● Bimonthly on-call education teleconference run by the registrars with the support of a CCDC at each meeting. ● Open invitation to all SpRs to come for refresher days on the Acute Desk when they need to, ideally once a year at a minimum. ● There is a secure online portal (“Sharepoint”) for new documents, SOPs and template letters etc. and SpRs are invited to regular PHE clinical tutorials.
<p><i>What are the requirements for demonstrating competence in learning outcome 6.9?</i></p>	<ul style="list-style-type: none"> ● There is no formal agreement on when LO 6.9 is signed off. StRs are recommended to keep a log of health protection on call work done after their 4 month placement , and to keep in touch with their local Health protection consultant. 6.9 is expected to be signed off by ES in discussion with this HP consultant/supervisor. ●
<p><i>Do registrars interested in specialising in health protection follow a standard set of placements to provide additional training in health protection?</i></p>	<ul style="list-style-type: none"> ● There is no formal training route or set of rotations but the HPT and PHE YH Centre are very flexible and open to SpRs doing placements, including with CRCE, FES, SIT and others. ● Registrars usually arrange to be based at the YH HPT for their final 6-12 WTE months of training and are encouraged to take the lead for incidents and do the work of a CCDC with supervision.
<p><i>What other opportunities have registrars in the region undertaken to gain additional training/experience in health protection?</i></p>	<ul style="list-style-type: none"> ● HPTs ● Screening and immunisation teams (PHE but embedded in NHSE) ● FES team ● PHE/hospital microbiology laboratories ● PHE CRCE

APPENDIX I: FPH Public Health Speciality Training Curriculum 2015- Key Area 6 (Health Protection) learning outcomes

Learning outcome	Examples of demonstrating learning outcome
6.1 Demonstrate knowledge and awareness of hazards relevant to health protection.	<i>Effective application of knowledge and awareness in acute response. Deliver teaching/ tutorial to peers/medical students on health protection topic</i>
6.2 Gather and analyse information, within an appropriate timescale, to identify and assess the risks of health protection hazards.	<i>Ascertain appropriate clinical, demographic and risk factor information when handling health protection enquiries and use that information to make a risk assessment.</i>
6.3 Identify, advise on and implement public health actions with reference to local, national and international policies and guidance to prevent, control and manage identified health protection hazards.	<i>Identify and manage close contacts associated with a case of bacterial meningitis, within an appropriate timeframe. Respond to an immunisation query from a practice nurse for a child who has recently arrived in the UK with reference to the WHO country specific information on immunisation.</i>
6.4 Understand and demonstrate the responsibility to act within one's own level of competence and understanding and know when and how to seek expert advice and support.	<i>Appropriate management of health protection enquiries and cases, with reference to local Consultant or National expert as necessary.</i>
6.5 Document information and actions with accuracy and clarity in an appropriate timeframe.	<i>Documentation of case notes on electronic or written case management systems (real time updating of case notes). Outbreak or incident control team minutes and actions produced and disseminated in an appropriate time frame as per outbreak plan.</i>
6.6 Demonstrate knowledge and awareness of the main stakeholders and agencies at a local, national and international level involved in health protection and their roles and responsibilities.	<i>Demonstrated by effective participation in multiagency meetings e.g. working across agencies on strategic plans and involving the correct agencies in acute response work. Respond to a travel associated case of legionnaires disease demonstrating an understanding of the role of international surveillance systems</i>
6.7 Demonstrate an understanding of the steps involved in outbreak/incident investigation and management and be able to make a significant contribution to the health protection response.	<i>Active membership of an incident/outbreak control team including investigation, implementation of control measures. Write up of outbreak report and identification and response to lessons learnt.</i>
6.8 Apply the principles of prevention in health protection work.	<i>Providing opportunistic advice on vaccination during routine health protection work. Ensuring schools and care homes have up to date guidance on infection prevention and control.</i>
6.9 Demonstrate competence to participate in an unsupervised out of hours (OOH) on call rota.	<i>Continuing regular participation in acute health protection work in and out of hours to attain a wide range of experience, skills and knowledge.</i>

APPENDIX II: FPH National Treasure Placements (2017)

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See FPH website for further details: http://www.fph.org.uk/national_treasures_placements