

Tropical medicine

Tropical medicine doctors treat patients with a wide range of tropical infections including malaria and hepatitis. They diagnose, investigate and manage imported infection.

This page provides useful information on the nature of the work, the common procedures/interventions, sub-specialties and other roles that may interest you.



Nature of the work

Tropical diseases are defined as those that are found in the tropics, in the tropical area around the equator. They are usually diseases that thrive in humid and/or hot conditions, especially in areas with poor financial resources.

The diseases are very wide-ranging and include:

- malaria – caused by disease-carrying mosquitoes
- African trypanosomiasis (sleeping sickness)
- amoebic dysentery and liver abscesses
- dengue fever – caused by a specific mosquito

- Ebola Virus Disease
- filariasis (eg causing elephantiasis)
- HIV and tropical conditions complicating it
- leishmaniasis (skin disease or kala azar)
- leprosy
- schistosomiasis (an acute/chronic disease caused by parasitic worms)
- snake bite
- tuberculosis
- typhoid
- worms

Tropical medicine doctors are also experts on general infections including HIV/AIDS, tuberculosis and viral hepatitis.

Within the UK tropical disease doctors treat people who have contracted exotic diseases whilst travelling overseas. Early diagnosis is very important, as is disease surveillance.

Tropical medicine doctors assess, investigate, control, diagnose and manage community and hospital/healthcare acquired infection.

Tropical medicine doctors diagnose exotic diseases and often use laboratory tests such as microscopy of blood films for malaria and other parasites, stool microscopy for gut parasites and examination of skin biopsies for leprosy and some other conditions.

They need a detailed understanding of microbiological techniques and how they apply to tropical medicine. Tropical medicine doctors often work directly in a laboratory and liaise closely with medical microbiologists and virologists. The samples may represent a significant biohazard risk.

Tropical medicine doctors often run travel clinics and provide advice either in person or over the phone to people travelling abroad. They also provide advice to GPs, when a patient arrives home from an overseas trip with symptoms. A typical example might be fever or prolonged diarrhoea acquired while travelling, or persistent skin problems after an overseas trip. Tropical doctors also advise on bites by snakes, spiders and insects.

Preventing the spread of infectious tropical diseases is paramount and stringent precautions such as isolation and quarantine will be used if necessary. Tropical medicine doctors work very closely with public health specialists in this field, providing specialist advice and expertise.

Many tropical medicine doctors specialise in academic medicine, and may spend much time working overseas, even though they are based in a UK academic centre. Research is an extremely important aspect of the work and involves writing grant applications, managing research programmes overseas and supervising postgraduate students doing research for PhD and other degrees.

Teaching medical students and doctors is a very big part of the job and most tropical medicine doctors have a considerable teaching work load.

“I love my job as it’s intellectually stimulating and we see rare and interesting cases from countries all over the world” Dr Nick Beeching Consultant in Infectious Diseases and Tropical Medicine

Read Nick’s story [1]

Common procedures/interventions

Treatment for tropical diseases is often with antibiotic or anti-viral drugs.

Sub-specialties

Paediatric tropical medicine

Want to learn more?

Find out more about:

- the working life [2] of someone in tropical medicine
- the entry requirements [3] and training and development [4]
- a first-hand account of life in tropical medicine [1]

- [Pay and conditions](#) Expand / collapse

This section provides useful information about the pay for junior doctors (doctors in training), specialty doctors, consultants and general practitioners.

Find out more about the current pay scales for doctors [5], and there's more information on the BMA website [6].

NHS Employers [7] provides useful advice and guidance on all NHS pay, contracts terms and conditions.

Medical staff working in private sector hospitals, the armed services or abroad will be paid on different scales.

- [Where the role can lead](#) Expand / collapse

Read about consultant and non-consultant roles in tropical medicine, flexible working and about wider opportunities.

Consultant roles

You can apply for consultant roles six months prior to achieving your Certificate of Completion of Training [8] (CCT [9]). You will receive your CCT [9] at the end of your tropical medicine training.

Managerial opportunities for consultants include:

- clinical lead - lead NHS consultant for the team
- clinical director - lead NHS consultant for the department
- medical director - lead NHS consultant for the Trust

Most NHS consultants will be involved with clinical and educational supervision of junior doctors.

Here are some examples of education and training opportunities:

- director of medical education - the NHS consultant appointed to the hospital board who is responsible for the postgraduate medical training in a hospital. They work with the postgraduate dean to make sure training meets GMC standards.
- training programme director - the NHS consultant overseeing the education of the local cohort of trainee doctors eg foundation training [10] programme director. This role will be working within the LETB/deanery
- associate dean - the NHS consultant responsible for management of the entirety of a training programme. This role will be also be working within the LETB/deanery

SAS doctor roles

Opportunities to work as a SAS (Specialist and Associate Specialist) doctor in tropical medicine are extremely limited

SAS doctors (Staff, Associate Specialists and Specialty Doctors) work as career grade specialty doctors who are not in training or in consultant posts. You will need at least four postgraduate years training (two of those being in a relevant specialty) before you can apply for Specialty Doctor roles. Find out more about SAS doctor roles. [11]

Some doctors are attracted to the SAS role as the hours are more regular than those of the consultant, and any on-call work and overtime beyond 7am-7pm is paid.

Other non-training grade roles

These roles include:

- trust grade
- clinical fellows

Academic pathways

If you have trained on an academic tropical medicine pathway or are interested in research there are opportunities in academic medicine.

For those with a particular interest in research, you may wish to consider an academic career in tropical medicine. Whilst not essential, some doctors start their career with an academic foundation post. Entry is highly competitive. This enables them to develop skills in research and teaching alongside the basic competences in the foundation curriculum. [12]

Entry into an academic career would usually start with an Academic Clinical Fellowship (ACF) at ST1-2 and may progress to a Clinical Lectureship (CL) at ST3 and beyond. Alternatively some trainees that begin with an ACF post then continue as an ST trainee on the clinical programme post-ST4.

After completion of the academic foundation trainees can then apply for academic core training posts (instead of normal core training). A PhD is often taken, either during core or specialty training.

Applications for entry into Academic Clinical Fellow posts are coordinated by the National Institute for Health Research Trainees Coordinating Centre (NIHRTCC). [13]

There are also numerous opportunities for trainees to undertake research outside of the ACF/CL route, as part of planned time out of their training programme. Find out more about academic medicine [14].

The Clinical Research Network [15](CRN) actively encourages all doctors to take part in clinical research.

Other opportunities

Around 80% of tropical medicine specialists in the UK are based in academic centres, and research opportunities within this specialty are particularly good.

The research includes collaborating with colleagues in the UK and overseas, writing papers and presenting work at conferences.

Some tropical medicine specialists spend time working with non-governmental organisations (NGOs) doing relief work. This is good experience early in training but those who want to make a career out of working with such organisations will want to obtain a very general medical training eg general practice training and perhaps formal public health training. Specialist training in public health may also be more appropriate for long-term posts in organizations such as the World Health Organisation.

Opportunities in the private sector are minimal but the potential for overseas working is excellent.

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| Job market and vacancies | Expand / collapse |
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This section provides useful information about the availability of jobs, how to find vacancies and sources of further information.

Job market information

NHS Digital regularly publish workforce statistics which show the number of full time equivalent consultants and doctors in training for each specialty: NHS Digital workforce statistics [16].

Competition ratios for medical specialty training places are published on Health Education England's specialty training webpage [17].

For information regarding Scotland, Wales and Northern Ireland please click on the links below.

[NHS Scotland medical and dental workforce data \[18\]](#)

[NHS Wales medical and dental workforce data \[19\]](#)

[Department of Health, Social Services and Public Safety workforce information for Northern Ireland \[20\]](#)

Where to look for vacancies

Specialist combined infection training is open to those who may want to train flexibly on a less than full-time [21]basis (LTFT). You can request and apply for this after you have been offered the job. Restrictions apply.

Registration and applications for specialist combined infection and tropical medicine training is online via Oriol [22].

Northern Ireland has its own recruitment process. For further details please visit the Northern Ireland Medical and Dental Training Agency

[23] website.

- [Further information](#) Expand / collapse

Organisations

British Infection Association [24]

British Medical Association [25]

BMJ Careers [26]

European Society of Clinical Microbiology and Infectious Diseases (ESCMID) [27]

General Medical Council [28]

Joint Royal College of Physicians Training Board [29]

London School of Hygiene and Tropical Medicine [30]

Liverpool School of Tropical Medicine [31]

Medical Research Council [32]

Royal College of Pathologists [33]

Training in Infection [34]

UK Clinical Virology Network [35]

Royal College of Physicians [36]

Royal College of Physicians of Edinburgh [37]

Royal College of Physicians and Surgeons of Glasgow [38]

Royal Society of Tropical Medicine and Hygiene (RSTMH) [39]

Wellcome Trust [40]

World Health Organisation [41]

Other roles that may interest you

- Public health consultants and specialists [42]
- Infectious diseases [43]
- Genitourinary medicine [44]
- Medical microbiology and virology (doctor) [45]

Links

- [1] <https://www.healthcareers.nhs.uk/explore-roles/medicine/tropical-medicine/real-life-story-dr-nick-beeching>
- [2] <https://www.healthcareers.nhs.uk/explore-roles/medicine/tropical-medicine/working-life>
- [3] <https://www.healthcareers.nhs.uk/explore-roles/medicine/tropical-medicine/entry-requirements-skills-and-interests>
- [4] <https://www.healthcareers.nhs.uk/explore-roles/medicine/tropical-medicine/training-and-development>
- [5] <https://www.healthcareers.nhs.uk/about-us/careers-medicine/pay-doctors>
- [6] <http://bma.org.uk/practical-support-at-work/pay-fees-allowances/pay-scales>
- [7] <http://www.nhsemployers.org/your-workforce/pay-and-reward>
- [8] https://www.healthcareers.nhs.uk/glossary#Certificate_of_completion_of_training
- [9] <https://www.healthcareers.nhs.uk/glossary#CCT>
- [10] https://www.healthcareers.nhs.uk/glossary#Foundation_training
- [11] <https://www.healthcareers.nhs.uk/i-am/currently-working-health/information-doctors/sas-doctors>
- [12] <http://www.foundationprogramme.nhs.uk/pages/academic-programmes>
- [13] <https://www.nihr.ac.uk/about-us/how-we-are-managed/managing-centres/about-the-trainees-coordinating-centre.htm>
- [14] <https://www.healthcareers.nhs.uk/i-am/currently-working-health/clinical-academic-careers/clinical-academic-medicine>
- [15] <http://www.crn.nihr.ac.uk/>
- [16] <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-workforce-statistics>
- [17] <https://specialtytraining.hee.nhs.uk/Competition-Ratios>
- [18] <http://www.isdscotland.org/Health-Topics/Workforce/Medical-and-Dental/>
- [19] <https://statswales.wales.gov.uk/Catalogue/Health-and-Social-Care/NHS-Staff/Medical-and-Dental-Staff>
- [20] <https://www.health-ni.gov.uk/articles/staff-numbers>
- [21] <https://www.healthcareers.nhs.uk/i-am/currently-working-health/information-doctors/less-full-time-training-doctors>
- [22] <https://www.oriel.nhs.uk/Web/>
- [23] <http://www.nimda.gov.uk/>
- [24] <http://www.britishinfection.org>
- [25] <http://www.bma.org.uk>
- [26] <http://careers.bmj.com/>
- [27] <https://www.escmid.org/>
- [28] <http://www.gmc-uk.org/>
- [29] <http://www.jrcptb.org.uk>
- [30] <http://www.lshtm.ac.uk/>
- [31] <http://www.lstmliverpool.ac.uk/>
- [32] <http://www.mrc.ac.uk>
- [33] <http://www.rcpath.org>
- [34] <http://www.trainingininfection.org.uk>
- [35] <http://www.clinicalvirology.org>
- [36] <http://www.rcplondon.ac.uk/>
- [37] <http://www.rcpe.ac.uk/>
- [38] <http://www.rcpsg.ac.uk>
- [39] <https://rstmh.org/>
- [40] <http://www.wellcome.ac.uk>
- [41] <http://www.who.int/en/>
- [42] <https://www.healthcareers.nhs.uk/explore-roles/public-health/roles-public-health/public-health-consultants-and-specialists>
- [43] <https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/medicine/infectious-diseases>
- [44] <https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/medicine/genitourinary-medicine>
- [45] <https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/pathology/microbiology-and->

virology-doctor