

## Infectious diseases

Doctors working in infectious diseases (ID) diagnose, investigate and treat infections caused by many micro-organisms such as bacteria, viruses, protozoa and fungi.

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

Working in infectious diseases combines both the clinical and laboratory skills of making diagnoses with providing effective treatment for a wide range of infections in both acutely and chronically ill patients.

There are four distinct but very much interdependent infection specialties: Infectious Diseases (ID), Medical Microbiology (MM), Medical Virology (MV) and Tropical Medicine (TM).

Specialists in infectious diseases have noted a big impact on their role of factors such as:

- an increase in the severity of infections, particularly in more frail populations of patients
- an increase in resistance to antibiotics
- new infections such as MRSA, Clostridium difficile and norovirus which can be hospital-acquired
- a rise in blood-borne virus infections, such as hepatitis B and C and HIV
- the growing popularity of global travel heightening the need for expertise in the prevention and treatment of travel-related 'international' disease

Specialists in infectious diseases typically treat conditions including:

- bone infections
- HIV
- pneumonia
- viral hepatitis (Inflammation of the liver)

Less commonly they may also treat conditions including:

- cholera
- dengue
- diphtheria
- dysentery (an intestinal infection)
- ebola
- malaria
- meningitis (inflammation of the brain membranes)
- [sepsis](#) <sup>[1]</sup> (a serious infection causing an exaggerated immune response)
- tuberculosis
- typhoid fever
- yellow fever

## Common procedures/interventions

These include:

- drug prescription
- insertion of a central venous [catheter](#) <sup>[2]</sup> – a thin flexible hollow tube is inserted into a large vein for the introduction of fluids including medication
- [lumbar puncture](#) <sup>[3]</sup> - a hollow needle is inserted into the lower part of the spinal canal to withdraw cerebrospinal fluid for diagnosis or to inject medication
- sigmoidoscopy (examination of part of the intestine using a very small camera)

## Sub-specialties

Infectious diseases is a broad and varied specialty providing opportunities for doctors to train in infectious diseases, alone or to combine the training with either general internal medicine or with medical microbiology (or virology). Some ID doctors will also specialise in tropical medicine.

## Want to learn more?

Find out more about:

- the working life <sup>[4]</sup> of someone in infectious diseases
- the entry requirements <sup>[5]</sup> and training and development <sup>[6]</sup>

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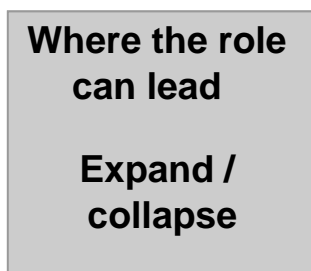
This section provides useful information about the pay for junior doctors (doctors in training), specialty doctors, consultants and general practitioners.

Find out more about the current pay scales for doctors <sup>[7]</sup>, and there's more on the BMA website <sup>[8]</sup>.

NHS Employers <sup>[9]</sup> 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.

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Read about consultant and non-consultant roles in infectious diseases, 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](#) <sup>[10]</sup> (CCT <sup>[11]</sup>). You will receive your CCT <sup>[11]</sup> at the end of specialty 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](#) <sup>[12]</sup> 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**

There are also opportunities to work at non-consultant level, for example as a SAS (Specialist and Associate Specialist) doctor. SAS doctors are non-training roles where the doctor has at least four years of postgraduate training, two of those being in a relevant specialty. Find out more about SAS doctor roles <sup>[13]</sup>.

### **Other non-training grade roles**

These roles include:

- trust grade
- clinical fellows

### **Academic pathways**

If you have trained on an academic infectious diseases 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 infectious diseases. Whilst not essential, some doctors start their career with an Academic Foundation post. This enables them to develop skills in research and teaching alongside the basic competences in the foundation curriculum.

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

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

[14]

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 [15].

The Clinical Research Network [16] (CRN) actively encourages all doctors to take part in clinical research.

- **Job market and vacancies**

- **Expand / collapse**

This section provides useful information about the availability of jobs, finding vacancies and where to find out more.

### **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 [17].

Competition ratios for medical specialty training places are published on Health Education England's specialty training webpage [18].

**On this section we have information for England only.** For information regarding Scotland, Wales and Northern Ireland please click on the links below.

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

[NHS Wales medical and dental workforce data \[20\]](#)

[Department of Health, Social Services and Public Safety workforce information for Northern Ireland \[21\]](#)

### **Where to look for vacancies**

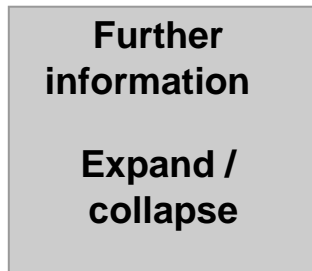
All trainees apply through the online application system Oriel [22]. You will be able to register for training, view all vacancies, apply, book interviews and assessment centres, and manage offers made to you.

Local education and training boards (LETBs)/deaneries will have details of training vacancies. Not all LETBs/deaneries will offer new training posts in all specialties in all years.

All jobs will be advertised on the NHS Jobs website [23].

The BMJ Careers website [24] also advertises vacancies.

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## Organisations

British HIV Association [25]

British Infection Association [26]

European Society of Clinical Microbiology and Infectious Diseases [27]

Royal College of Physicians [28]

Royal College of Physicians of Edinburgh [29]

Royal College of Physicians and Surgeons of Glasgow [30]

Royal Society of Tropical Medicine and Hygiene [31]

## Real-life stories

A career in infectious diseases (BMJ) [32]

Dr Karen Devine – ST4, infectious diseases (RCPE) [33]

## Other roles that may interest you

- Acute internal medicine [34]
- Emergency medicine [35]
- Genitourinary medicine [36]
- Medical microbiology and virology (doctor) [37]

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**Source URL:** <https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/medicine/infectious-diseases>

## Links

- [1] <https://www.healthcareers.nhs.uk/glossary#Sepsis>
- [2] <https://www.healthcareers.nhs.uk/glossary#Catheter>
- [3] [https://www.healthcareers.nhs.uk/glossary#Lumbar\\_puncture](https://www.healthcareers.nhs.uk/glossary#Lumbar_puncture)
- [4] <https://www.healthcareers.nhs.uk/explore-roles/medicine/infectious-diseases/working-life>
- [5] <https://www.healthcareers.nhs.uk/explore-roles/medicine/infectious-diseases/entry-requirements-skills-and-interests>
- [6] <https://www.healthcareers.nhs.uk/explore-roles/medicine/infectious-diseases/training-and-development>
- [7] <https://www.healthcareers.nhs.uk/about-us/careers-medicine/pay-doctors>
- [8] <http://bma.org.uk/practical-support-at-work/pay-fees-allowances/pay-scales>
- [9] <http://www.nhsemployers.org/your-workforce/pay-and-reward>
- [10] [https://www.healthcareers.nhs.uk/glossary#Certificate\\_of\\_completion\\_of\\_training](https://www.healthcareers.nhs.uk/glossary#Certificate_of_completion_of_training)
- [11] <https://www.healthcareers.nhs.uk/glossary#CCT>
- [12] [https://www.healthcareers.nhs.uk/glossary#Foundation\\_training](https://www.healthcareers.nhs.uk/glossary#Foundation_training)
- [13] <https://www.healthcareers.nhs.uk/i-am/currently-working-health/information-doctors/sas-doctors>
- [14] <https://www.nihr.ac.uk/>
- [15] [http://www.medicalcareers.nhs.uk/career\\_options/academic\\_medicine.aspx](http://www.medicalcareers.nhs.uk/career_options/academic_medicine.aspx)
- [16] <http://www.crn.nihr.ac.uk/>
- [17] <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-workforce-statistics>
- [18] <https://specialtytraining.hee.nhs.uk/Competition-Ratios>
- [19] <http://www.isdscotland.org/Health-Topics/Workforce/Medical-and-Dental/>
- [20] <https://statswales.wales.gov.uk/Catalogue/Health-and-Social-Care/NHS-Staff/Medical-and-Dental-Staff>
- [21] <https://www.health-ni.gov.uk/articles/staff-numbers>
- [22] <https://www.oriel.nhs.uk/>
- [23] <https://www.jobs.nhs.uk/>
- [24] <http://careers.bmj.com>
- [25] <http://www.bhiva.org/>
- [26] <http://www.britishinfection.org/>
- [27] <https://www.escmid.org/>
- [28] <http://www.rcplondon.ac.uk/>
- [29] <http://www.rcpe.ac.uk/>
- [30] <http://www.rcpsg.ac.uk>
- [31] <https://rstmh.org/>
- [32] <http://careers.bmj.com/careers/advice/view-article.html?id=3029>
- [33] <http://www.rcpe.ac.uk/careers-resource/infectious-diseases>
- [34] <https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/medicine/acute-internal-medicine>
- [35] <https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/emergency-medicine>
- [36] <https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/medicine/genitourinary-medicine>
- [37] <https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/pathology/microbiology-and-virology-doctor>