The Pathology Laboratory

Welcome to Hereford Hospitals NHS Trust

This leaflet gives you some information on work performed by the laboratories. We hope it will help you understand the work we do.
Welcome

The Pathology Laboratory service of the County Hospital offers high quality, efficient and cost effective services using modern technologies to Hereford Hospitals NHS Trust, local General Practitioners, other Trusts, Hospitals and Healthcare providers.

The Pathology Laboratory of the Hereford County Hospital like those in most NHS Hospitals is organised into 4 departments, which have different functions. These departments are:

- Clinical Chemistry
- Haematology - including Blood Transfusion
- Cellular Pathology - including Cytopathology and Histopathology
- Microbiology - including Bacteriology, Virology and Immunology

This information leaflet describes who works in the departments and what their functions are, and lists contact numbers.

If you are to have a pathology investigation and you want to know more you may find the following link useful

www.labtestonline.org.uk

Location of Laboratory

The Pathology Laboratory is here:
Sometimes patients are asked to attend the Pathology Laboratory to collect special containers or to have special blood tests, where we need to perform the test quickly, alternatively you may be attending for a series of tests (dynamic function test).

**Public Transport**

There are good transport links to and from the hospital. There is a bus stop near the Main Entrance, from which you can catch the numbers 71, 72, 74, 76 and H8 buses, which take you into Hereford. Hereford Railway Station is 300 yards away.

**General**

All departments work to high quality standards and participate in National Quality Assessment programmes, which assure that the work we are performing is of the highest quality and comparable to that in other hospitals.

The departments are all accredited by the Clinical Pathology Accreditation AND Blood Safety Quality Regulation 2005 bodies that sets the standards for laboratory medicine in the UK. This involves continuously assessing the quality of the services and ensuring we bring the best possible diagnostic care to the patient we serve.

When samples have been analysed the results are electronically transmitted to the wards at the hospital or to your GP’s computer system. In most cases this happens the same day as the sample is taken. Other tests may require longer to process.

To maintain patient confidentiality and comply with the Data Protection Act and other legal requirements the results of your tests are only given to GPs, Hospital doctors and other health care professionals who need to know.

Within the Pathology Department there are various staff groups. These include doctors, clinical scientists, biomedical scientists, cytoscreeners, medical laboratory assistants, anatomical pathology technicians, administrative and clerical staff. All are essential members of the pathology team and are there to ensure your sample is analysed accurately and efficiently.

We may retain surplus samples for quality control use or use in establishing normal values for tests. All your details will be removed so you cannot be identified. If however you are not happy with this please ask for the request form to be marked “Do not use for quality control or establishing normal values”
From a small blood or urine sample the staff in the Clinical Chemistry Department are able to analyse the sample for the diagnosis or treatment of many diseases. Examples include the diagnosis and monitoring of glucose (sugar) in diabetes, the early detection of liver or kidney disease and the detection of coronary heart disease. Drug levels may be measured in blood to ensure appropriate ranges.

The department also performs a variety of endocrine tests for hormones (molecules that circulate and regulate your body functions) for example, thyroid hormones and fertility investigations. A number of other tests are performed to aid the diagnosis in an acutely ill patient. The department also performs a range of tests for which the patient will need to attend the Pathology Laboratory.

The department analyses about 1000 samples from different sources per day and perform in excess of 2.5 million tests per year.

The department also offers a clinical advisory service to your GP or hospital consultant on the interpretation and selection of appropriate tests.

Haematology investigations help the diagnosis of blood disorders e.g. anaemia, blood clotting problems and leukaemias. Many of the tests are automated but may only become meaningful after skill and judgement have been applied. Anti coagulant therapy (thinning the blood) is monitored by the Haematology Department.

The safety of patients receiving blood transfusions depends upon the high level of skill and concentration for the task of blood grouping and for cross matching the donated blood, thereby ensuring that the patient receives the correct blood when it is required.

On a typical day the department would analysis 750 samples for anaemia, signs of infection or to monitor treatment of patients with leukaemia. It would also check for infectious mononucleosis in 10 patients, check for signs of inflammatory disease in 150 patients. The Blood Bank would test the blood group of 50 patients and prepare approximately 50 units of blood for transfusion.
Medical Microbiology

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<tr>
<th>Contact Title</th>
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<tbody>
<tr>
<td>Head of Department</td>
<td>Dr V Sivaprakasam</td>
<td>Ext 5717 / 5724</td>
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<tr>
<td>Consultant Microbiologist</td>
<td>Dr A Johnson</td>
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</tr>
<tr>
<td>Laboratory Manager</td>
<td>Mr N Clarke</td>
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This is the study of the cause of infectious diseases. The department is involved in the diagnosis of a wide range of infections including the causes of meningitis, MRSA, HIV, tuberculosis, influenza and food poisoning. The Microbiology Laboratory provides a diagnostic service and provision of information to prevent the spread of disease in the hospital and community.

The results of procedures for the isolation and identification of microorganisms from specimens also assists in the appropriate treatment of infections and reduces the risk of antibiotic resistance developing.

The Microbiology Department processes 500 specimens in a typical day.

The department also offers a clinical advisory service to your GP or hospital consultant on the interpretation and selection of appropriate tests.

Cellular Pathology

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<th>Contact Title</th>
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<tbody>
<tr>
<td>Consultant Histopathologist</td>
<td>Dr C Caldwell</td>
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<tr>
<td>Consultant Histopathologist</td>
<td>Dr M Hayes</td>
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<td>Consultant Histopathologist</td>
<td>Locum</td>
<td>Ext 5732</td>
</tr>
<tr>
<td>Histology Manager</td>
<td>Mr A Preece</td>
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Histopathology plays an important role in the diagnosis and treatment of many diseases. Tissue samples are removed, often during a procedure called a biopsy, and are then sent to Histopathology where they can be studied microscopically to establish the nature of the abnormality. The tissue must be fixed (preserved) as soon as it is removed. In the laboratory, it is processed and sectioned (cut into very thin slices; a section would be less than 1mm thick) onto glass microscope slides and then stained with dyes to make the tissue structures visible through a microscope.

Tissue samples are usually taken at surgery but occasionally during other procedures. Diseases such as cancer can be diagnosed by recognition of abnormal features within the tissues and cells. The Histopathology Department typically receives approximately 50 samples in a working day. The department works closely with the Three Counties Cancer Network to improve diagnostic cancer services.

There are mortuary services on the County Hospital site.
This department is best known for the work in screening cervical cells, but it also provides other services.

The Cervical Screening Programme calls women at 3 or 5 yearly intervals depending on age, to have a sample of cervical cells taken. The cells are sent to Cytopathology to be processed and screened for abnormalities. If necessary the patient may be recalled for further investigations or may need a further sample taken.

Other services include rapid assessment of breast lumps, examination of bodily fluids e.g. urine

Typically the Cytopathology Department will deal with 100 samples a day.

Clinical Laboratory Services: Quality Management

The Pathology Laboratory runs a Quality Management System (QMS) as a vehicle to deliver a quality service. The QMS provides the framework for the organisational structure, responsibilities, policies, procedures, processes, standards and the resources required; the QMS is a dynamic and evolving activity and is our commitment to continuous quality and process improvement with a patient focus.

As part of the management of the QMS, the Clinical Laboratory Service has appointed a Quality Manager, Mrs Kim Smith.

Useful Links

- Clinical Pathology Accreditation  www.cpa-uk.co.uk
- UK National External Quality Assessment Scheme  www.ukneqas.org.uk
- Central Quality Assurance Scheme  www.cqas.org.uk

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