



Ref: FOIA Reference 2023/24-742

Royal Stoke University Hospital
Data, Security and Protection
Newcastle Road
Stoke-on-Trent
Staffordshire
ST4 6QG

Date: 12th April 2024

Email foi@uhn.nhs.uk

Dear ,

I am writing to acknowledge receipt of your email dated 5th February 2024 requesting information under the Freedom of Information Act (2000) regarding liver function tests.

On 12th February 2024 we contacted you via email as we required a time frame.

On 2nd April 2024 you replied via email with:

'please may the information be set the year of 2022- 2023.'

As of 1st November 2014 University Hospitals of North Midlands NHS Trust (UHNM) manages two hospital sites – Royal Stoke University Hospital, and County Hospital (Stafford). Therefore the response below is for the two sites combined from that date where appropriate.

Q1 I am writing to request information under the Freedom of Information Act. I am a medical student undertaking a clinical audit of the normal ranges of liver function tests, and how these normal ranges were developed across the UK, with the intention of publication. This information should be readily available through your clinical biochemistry or pathology department.

I would be grateful if you could provide me with the following:

1. The normal range (adults and children) for the following liver enzymes: alanine transaminase (ALT), aspartate transaminase (AST), alkaline phosphatase and gamma GT.

A1 See below:

Alanine Transferase: 0-48 iu/L all ages

Aspartate transaminase: iu/L

< 5 days 0 - 90

< 14 days 0 - 75

< 1 year 0 - 60

< 3 year 15 - 45

> 3 years 0-40

> 3 years 0-40

> 3 years 0-40

> 3 years 0-40

Gamma Glutamyl Transferase: 0-35 iu/L all ages

Alkaline Phosphatase: iu/L	
< 1 month	70-380
1 month – 15 yrs	60-425
≥16 yrs	30-130

Q2 The method and machine used with reference so it can be identified.

A2 See below:
 Siemens Atellica at Stoke
 Siemens Advia at County

Q3 How was your local normal range determined?

1. From the reference range specified by the manufacturer
2. By the lab of a large group of normal volunteers
3. From historical data
4. Other – please describe.

A3 See below.
 Aspartate Transaminase/Alanine Transaminase /Gamma Glutamyl Transferease -Historical data
 Alkaline Phosphatase – Pathology Harmony

Q4 Do your liver function tests automatically include measurement of AST?

A4 No

Q5 How many sets of liver function tests, which include measurement of ALT and alkaline phosphatase, does your hospital or laboratory complete each year? How many patients does this represent?

A5 See below:
 Alanine Transferase: 119987
 Alkaline Phosphatase: 127283
 UHNM does not hold the data of how many patients that this represents or bone profile

Q6 How many requests for measurement of AST does your hospital or laboratory complete each year? How many patients does this represent?

A6 See below:
 3392
 UHNM does not hold the data of how many patients that this represents.

Q7 How many values exceed the upper limit of normal for each liver function test?

A7 Information not held

Q8 If you do not hold this information because you consider the analyses to be done externally by an outside laboratory, please provide the name of the laboratory and email address for their FOI officer.

A8 Not applicable

*Please note that any individuals identified do not give consent for their personal data to be processed for the purposes of direct marketing.

UHNM NHS Trust is a public sector body and governed by EU law. FOI requestors should note that any new Trust requirements over the EU threshold will be subject to these regulations and will be advertised for open competition accordingly.

Where the Trust owns the copyright in information provided, you may re-use the information in line with the conditions set out in the Open Government Licence v3 which is available at <http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>. Where information was created by third parties, you should contact them directly for permission to re-use the information.

An anonymised copy of this request can be found on the Trust's disclosure log, please note that all requests can be found at the following link: <http://www.uhnm.nhs.uk/aboutus/Statutory-Policies-and-Procedures/Pages/Freedom-of-Information-Disclosure-Log.aspx>

This letter confirms the completion of this request. A log of this request and a copy of this letter will be held by the Trust.

If you have any queries related to the response provided please in the first instance contact my office.

Should you have a complaint about the response or the handling of your request, please also contact my office to request a review of this. If having exhausted the Trust's FOIA complaints process you are still not satisfied, you are entitled to approach the Information Commissioner's Office (ICO) and request an assessment of the manner in which the Trust has managed your request.

The Information Commissioner may be contacted at:

Information Commissioner's Office, Wycliffe House, Water Lane, Wilmslow, Cheshire SK9 5AF or via www.ico.org.uk.

Yours,



University Hospitals
of North Midlands
NHS Trust

Rachel Montinaro
Data Security and Protection Manager - Records

