

Waikato DHB Laboratory offers the following QA:

Biochemistry General	Microbiology Mycology
Biochemistry HbA1c	Microbiology Parasitology
Biochemistry Urine	Microbiology Synovial Fluid
Endocrinology & Tumour Markers	Mycobacteria Microscopy
Faecal Antigen	Occult Blood
Faecal Occult Blood	Point of Care Hb & HbA1c
Foetal Maternal Haemorrhage	Point of Care Glucose
Haematology CBC	Point of Care Pregnancy (HCG)
Haematology Coagulation	Point of Care Urinalysis
Haematology D-dimer	Rotavirus
Haematology Morphology	Urine Microscopy
Haematology Reticulocytes	
Helicobacter Pylori Faecal Antigen	
Immunology Protein Electrophoresis	
Immunology Specific Proteins	
Microbiology Bacteriology	

These programmes have been initiated in response to demand over the last 17 years and have 78 laboratories participating throughout New Zealand and Australia.

Advantages of the programme are:

- Competitive pricing
- Electronic Result Entry
- Recognised by IANZ
- Rapid Turnaround Times
- Fresh Human Material
- Wholly NZ owned and operated
- Analytical platforms identified by colour coding

In 2014 Waikato DHB Laboratory developed a website which allowed all participants to enter their results online.

Results are published directly to the website and are also sent electronically to all registered participants via email (in PDF format). This offers several major advantages:

- Quicker turnaround times for reports, you will receive them as soon as they are published.
- Electronic Reporting: You will receive four reports attached (in PDF format) which you will be able to view on screen, or print as you wish. You will also receive a copy of the raw data in Excel attached, which you will be able to save on your PC, and manipulate the data as required.

Once a batch has been closed and results have been published we are unable alter the results. If there is any discrepancy, laboratories are encouraged to keep a manual record for the purposes of IANZ audits.

BIOCHEMISTRY/ENDOCRINOLOGY:

BIOCHEMISTRY GENERAL:

This programme provides regular external QA for routine Biochemistry analysis. A plasma pool sample that has tested negative for Hep B, Hep C and HIV is dispatched weekly. Samples will have a range of values.

The programme includes the following analytes:

Sodium, Potassium, Chloride, Creatinine, Urea, Protein, Albumin, ALP, ALT, AST, GGT, CK, P-Amylase, Lipase, Total Amylase, Iron, TIBC, Calcium, Magnesium, Phosphate, Glucose, B-Hydroxybutyrate, Uric Acid, Cholesterol, Triglyceride, HDL, Troponin, Myoglobin and CRP.

Data is reported in a spreadsheet showing the results of all participating laboratories and the mean and median result for each analyte with S.D. and C.V.

Colour coding is used to identify each laboratory's analyser group. Participating laboratory's percentage of the mean data is reported showing previous cycles data and allowing historical review. Graphical representation of the result compared to the RCPA limits of acceptability is provided. This is a cumulative report and allows historical review.

BIOCHEMISTRY HbA1c:

This programme provides regular external QA for HbA1c analysis. An EDTA sample is dispatched on the first and third week of the month. Samples will have a range of values. Data submission and reporting is as for Biochemistry General.

BIOCHEMISTRY URINE:

This programme provides regular external QA for routine Biochemistry analysis. A urine sample is dispatched monthly. A range of analyte values is targeted. An acidified and a non-acidified sample are provided.

The programme includes the following analytes: Sodium, Potassium, Creatinine, Urea, Total Protein, Albumin, Calcium and Phosphate.

Data submission and reporting is as for Biochemistry General.

ENDOCRINOLOGY AND TUMOUR MARKERS:

This programme provides regular external QC for routine Endocrinology and Tumour Marker analysis. A serum pool sample that has tested negative for Hep B, Hep C and HIV is dispatched monthly. A range of analyte values is targeted.

The programme includes the following analytes:

FT3, FT4, TSH, Vitamin B12, Folate, Red Cell Folate, Ferritin, LH, FSH, Prolactin, Oestradiol, Progesterone, Testosterone, Cortisol, BNP, PTH, Vitamin D, HCG, AFP, CEA, PSA, Free-PSA, CA125, CA15-3, CA199 and Thyroglobulin, CRP. Laboratories can submit results for as many analytes as they wish. Data submission and reporting is as for Biochemistry General.

Those wanting to submit results for six or less results should enrol in programme 2 and will receive a smaller volume of sample at a reduced cost.

MICROBIOLOGY:

FAECAL ANTIGEN:

This programme is designed to test for the presence of Clostridium difficile, Giardia, lamblia and Cryptosporidium parvum antigens found in faecal samples. Patient specimens that test positive for these antigens are diluted to obtain an appropriate amount of specimen for dispatch and then frozen at -20°C until the dispatch date. Five dispatches each comprising of three samples will be sent out. Results are reported in a table format for comparison with other laboratories. **NOTE: These samples do not have fixative added to them and therefore may be unsuitable for direct immunofluorescence assays for Giardia and Cryptosporidium.**

FAECAL OCCULT BLOOD QA:

This programme is designed to test both screening and confirmatory tests utilised by laboratories to test for the presence of Haemoglobin in faecal samples. Patient specimens are diluted to obtain the appropriate amount of specimen for dispatch then frozen at -20°C until the dispatch date. Four dispatches, each consisting of two faecal samples, are sent for the detection of occult blood. Results are reported in a table format for comparison with other laboratories.

HELICOBACTER PYLORI FAECAL ANTIGEN:

This programme is designed to test for the presence of Helicobacter pylori antigen found in faecal samples. Four dispatches, each consisting of two faecal samples will be sent out. Results are reported in a table format for comparison with other laboratories.

MICROBIOLOGY BACTERIOLOGY:

This programme provides general bacteriology, covering routine culture and sensitivity testing including anaerobe culture. Specimen types covered are Respiratory, Wound swabs, Genital swabs, Faeces, Urines, Blood cultures and Fluids.

Three freeze-dried cultures are dispatched monthly with a worksheet detailing specimen type and clinical information.

Each laboratory is given an anonymous identification number and results are issued to coincide with the next dispatch. These are displayed in table format and include an educational summary based on CLSI/EUCAST guidelines and recent literature.

The aim of the programme is to provide:

- Relevant QA of routine microbiology methods
- A comparison of techniques and results of other New Zealand laboratories
- Educational information and topical discussion of microbiological techniques
- Reports and references from recent literature

MICROBIOLOGY MYCOLOGY:

The Mycology programme provides quality control for the identification of fungi commonly seen in New Zealand. Five dispatches of three cultures are dispatched bimonthly. Isolates include dermatophytes, moulds and yeast. Occasionally a difficult isolate will be sent for educational purposes only. Results are reported anonymously in a table format along with an educational summary.

MICROBIOLOGY PARASITOLOGY:

Five batches are sent for identification of parasites. Each dispatch consists of two samples preserved in formal saline and concentrated for microscopic examination. Occasionally an extra sample is sent for educational interest only.

MICROBIOLOGY SYNOVIAL FLUID EXAMINATION OF CRYSTALS:

Four dispatches each consisting of two synovial fluid samples are sent for examination for birefringent crystals. Results are reported on a comparative basis.

MYCOBACTERIA MICROSCOPY:

Quality control is provided for level 1 processing of mycobacterial samples. Four dispatches each of two fixed smears are sent for staining and microscopy.

ROTAVIRUS QC:

Four dispatches, each consisting of two faecal samples, are sent for the detection of Rotavirus. The samples are prepared by the Virology Laboratory and administered by Microbiology. Results are reported in a table format for comparison with other laboratories.

URINE MICROSCOPY:

This programme is designed to look for the presence of cellular and crystalline material in urines (excluding bacteria). Pooled urine samples with similar pH and microscopy's are collected into Copan UriSwabs and sent out to laboratories for microscopic examination.

Four dispatches, each consisting of two UriSwabs will be sent out. Results are reported in a table format for comparison with other laboratories. Copan UriSwabs hold approximately 2ml of urine and preserve the cell count of the urine without the need for refrigeration or additional of extra chemicals.

HAEMATOLOGY:

FOETAL MATERNAL HAEMORRHAGE:

Four dispatches per year. Samples are whole blood for the estimation of percentage of foetal red cells and calculation of the volume of foetal maternal haemorrhage.

Unstained slides can be supplied to Australian Laboratories.

HAEMATOLOGY CBC:

This QA programme covers the routine tests that are run through a general Haematology analyser. The specimen which is dispatched weekly is fresh human whole blood and the following analytes are covered: RBC, Hb, Hct, MCV, MCH, RDW, WBC, PLT and the automated white cell differential (absolute and percentage values).

This programme has the advantage of providing fresh blood rather than fixed material. There is sufficient material provided to allow analysis on more than one analyser. Data presentation is as for Biochemistry.

HAEMATOLOGY COAGULATION:

The aim of this programme is to provide regular external QA for routine coagulation testing. The tests included are: INR, APTT and Fibrinogen quantitation. A lyophilised plasma sample (1ml) is dispatched monthly. Samples are negative for HIV, Hep C and Hep B. Specimens from patients on anticoagulant therapy (Warfarin and/or Heparin) are included. When available, pathological specimens (eg: Lupus, anticoagulant, factor deficiency) will be included. Results are graphically presented and returned promptly.

HAEMATOLOGY D-dimer:

A citrated plasma pool that has tested negative for Hep B, Hep C and HIV is dispatched on a monthly basis.

Samples cover a range of values including these at or near the cut-off level for DVT exclusion.

HAEMATOLOGY MORPHOLOGY:

The aim of the Health Waikato Blood Morphology programme is three fold:

- To enable laboratories to compare their results with each other and a reference laboratory
- To expose staff in participating laboratories to a wide range of Haematology Morphology that some might see infrequently
- To educate

An MGG stained peripheral blood film is dispatched each Tuesday. Accompanying documentation provides brief clinical details and relevant Haematology results. Participants are required to perform a differential and describe the film appearances and attempt a diagnosis. Occasionally ancillary material such as HbH stains may be dispatched. All participating laboratories are coded to ensure anonymity.

10 days are allowed for the return of results and the results will be emailed to each participating laboratory electronically in PDF format. Detailed results from Health Waikato or the laboratory providing the material eg: Bone Marrow report, special stains, Flow Cytometry and Cytogenetics where appropriate are also included. An educational supplement which includes a colour photograph of the relevant Morphology will also be attached in PDF format with the results.

A wide range of Haematology Morphology is utilised thus enabling participating laboratories to build up a slide collection of interesting cases for ongoing educational purposes.

Laboratories with interesting Morphology cases are encouraged to submit these to the programme for use as QC slides. A minimum of 80 unstained blood films are required with relevant clinical details and laboratory results.

HAEMATOLOGY RETICULOCYTES:

This is a weekly programme utilising the EDTA Specimen distributed for the CBC programme. The programme is suitable for both automated and manual Reticulocytes methods. Results for both percentage and absolute Reticulocytes values are recorded and presented in a graphical format.

IMMUNOLOGY:

IMMUNOLOGY PROTEIN ELECTROPHORESIS:

Two serums (or a serum and urine) will be dispatched every 8 weeks.

Accompanying documentation includes Total Protein, Albumin, IgG, IgA, and IgM results.

The aim of the programme is to enable laboratories to compare results and comments for different types of paraproteins over a wide range of detectable levels.

IMMUNOLOGY SPECIFIC PROTEINS:

A serum pool that has tested negative for Hepatitis B, Hepatitis C and HIV will be dispatched once a month. The following analytes will be offered: IgG, IgA, IgM, Haptoglobin, Anti-Streptolysin O and DNASE B. A spreadsheet is sent out showing the results of all participating laboratories colour coded according to analysis platform.

POINT OF CARE:

POINT OF CARE – Hb and HbA1c:

This survey is intended for POCT analysers eg: HemoCues, DCA's or other analysers which are used in a clinical setting. Two 200µL whole blood samples will be dispatched monthly. One sample will be for Hb and one for HbA1c. Data presentation will be as per Biochemistry.

The first Hb sample will cost \$200 (email results) then \$10 for each extra Hb from the same type of analyser – eg: 5 HemoCues = \$240-00 total, 5 HemoCues and 1 DCA = \$300.
For the combined package, the charge will cost \$250 (email results) plus \$10 per extra analyser,

POINT OF CARE GLUCOSES:

This survey is intended for Glucose Meters; however please note that they are not suitable for HemoCue Glucose Meters. The sample is serum which has tested negative for Hep B, Hep C and HIV. They will be dispatched on the 2nd Wednesday of every month, from February through to December. Samples will be dispatched in packs of 10 vials – one for each meter.

Please send the meter serial numbers so that the result can be recorded against the appropriate meter. Analyse the sample as an arterial/capillary sample.

Results will be returned to the designated QC Officer. The survey costs \$150-00 per annum. More samples/meters than a vial of 10, requires an additional registration fee.

POINT OF CARE PREGNANCY (HCG) TESTS:

This survey is intended for qualitative urine pregnancy tests. Two samples will be sent out once per month on the second Tuesday from mid February through to mid December. Programme costs \$200 (email results) then \$10 for each extra ward.

POINT OF CARE URINALYSIS:

Two patient samples will be sent in UriSWAB transport and preservative containers. Urine is to be squeezed out of the sponge and tested on Point of Care Urinalysis devices. Samples will be dispatched on the second Tuesday of every month from February to December.

ACKNOWLEDGEMENT:

On behalf of Health Waikato Laboratory we would like to thank Roche Diagnostics, ESL Laboratories and Fort Richards Laboratory for their ongoing support of our Biochemistry, Haematology, Immunology and Microbiology programmes.

FOLDERS ARE NOT BEING OFFERED IN 2015!

2015 PROGRAMMES:	Primary Analyser Cost:	Required: <i>Please Tick</i>	Extra Analyser Cost:	Quantity Required:
<u>BIOCHEMISTRY:</u>				
Biochemistry General	\$510	<input type="checkbox"/>	\$160 each	<input type="checkbox"/>
Biochemistry HbA1c	\$210	<input type="checkbox"/>	\$160 each	<input type="checkbox"/>
Biochemistry Urine	\$210	<input type="checkbox"/>	\$160 each	<input type="checkbox"/>
Endocrine – 1	\$410	<input type="checkbox"/>	\$160 each	<input type="checkbox"/>
Endocrine – 2 (submit 6 or less results)	\$330	<input type="checkbox"/>	\$160 each	<input type="checkbox"/>
<u>HAEMATOLOGY:</u>				
Haematology CBC	\$460	<input type="checkbox"/>	\$160 each	<input type="checkbox"/>
Haematology Coagulation	\$310	<input type="checkbox"/>	\$160 each	<input type="checkbox"/>
Haematology D-Dimer	\$210	<input type="checkbox"/>	\$160 each	<input type="checkbox"/>
Foetal Maternal Haemorrhage	\$210	<input type="checkbox"/>		
Haematology Morphology- NZ	\$810	<input type="checkbox"/>		
Haematology Morphology- Australia	\$810	<input type="checkbox"/>		
Haematology Reticulocytes	\$190	<input type="checkbox"/>	\$160 each	<input type="checkbox"/>
<u>IMMUNOLOGY:</u>				
Immunology Protein Electrophoresis	\$220	<input type="checkbox"/>		
Immunology Specific Proteins	\$210	<input type="checkbox"/>		
<u>MICROBIOLOGY:</u>				
Faecal Antigen Programme	\$220	<input type="checkbox"/>		
Helicobacter Pylori Faecal Antigen	\$160	<input type="checkbox"/>		
Microbiology Bacteriology	\$520	<input type="checkbox"/>		
Microbiology Mycology	\$320	<input type="checkbox"/>		
Microbiology Parasitology	\$220	<input type="checkbox"/>		
Microbiology Synovial Fluid	\$160	<input type="checkbox"/>		
Mycobacteria Microscopy	\$160	<input type="checkbox"/>		
Occult Blood	\$160	<input type="checkbox"/>		
Rotavirus	\$160	<input type="checkbox"/>		
Urine Microscopy	\$160	<input type="checkbox"/>		
<u>POINT OF CARE TESTING:</u>				
POCT Haemoglobin (Hb)	\$210	<input type="checkbox"/>	\$10 each	<input type="checkbox"/>
POCT HbA1c	\$210	<input type="checkbox"/>	\$10 each	<input type="checkbox"/>
POCT Hb & HbA1c-participating in both	\$210	<input type="checkbox"/>	\$10 each	<input type="checkbox"/>
POCT Pregnancy (HCG) Tests	\$210	<input type="checkbox"/>	\$10 each	<input type="checkbox"/>
POCT Urinalysis	\$210	<input type="checkbox"/>	\$10 each	<input type="checkbox"/>
POCT Glucoses (per pack of 10)	\$160	<input type="checkbox"/>	\$10 each	<input type="checkbox"/>
REGISTRATION SUBTOTALS:	\$		\$	
<u>ADMINISTRATION COSTS:</u>				
Courier Bags (All programmes except Micro)	\$150	<input type="checkbox"/>		
Microbiology Courier Bags	\$170	<input type="checkbox"/>		
Overseas Postage (Australian participants)	\$150	<input type="checkbox"/>		
TOTAL REGISTRATION COST:	\$			

(All Programme prices are G.S.T. Exclusive)

Health Waikato Laboratory QC Programmes
Contact List for 2015

(07) 8398606 then ask for the extension you require....

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Fax numbers: 07-8580966 (main number), 07-8398759 (alternative number)