A woman with an unsatisfactory Pap test report should have a repeat smear in 6-12 weeks, with correction, when possible, of the problem that caused the unsatisfactory smear."

Management of Women with Unsatisfactory Pap Smears
Dr Jason Stone

A Pap smear reported as “unsatisfactory” is a frustrating outcome for both the smear taker and the patient. It can lead to increased anxiety, embarrassment and inconvenience as the smear needs to be repeated. This article will explain the causes of an unsatisfactory smear, and will hopefully allow a better understanding of the reasons for the report.

continued >
What are the criteria for a ‘satisfactory’ smear?

There is no agreement in the literature regarding the number of cells visible on a Pap smear (cellularity) below which there is a significant fall in sensitivity.

The current guidelines of the Australian National Cervical Screening Program defines an unsatisfactory smear as one with less than 10000 well-preserved well-visualised squamous epithelial cells for conventional Pap smears (or less than 5000 for liquid-based preparations).

It is important to note that specimens are not classified as unsatisfactory on the basis of an absence of an endocervical component alone. This guideline is based on The Bethesda System 2001 definition and allows international consistency.

Rather than counting every single cell, laboratories assess the adequacy by comparing the cellularity to reference images. Any smear with abnormal cells is regarded as satisfactory and the abnormality is reported despite the cellularity.

What makes a smear unsatisfactory?

Smears can have less than 10000 well-visualised cells for the following reasons:

- Insufficient cells removed at time of taking the smear
- Insufficient cells transferred onto the slide
- Sufficient cellularity but cells are obscured by blood, mucus, inflammatory cells or lubricant
- The cells are not obscured but are poorly fixed making assessment impossible. Only a few minutes on the slide without fixation are sufficient to render the slide uninterpretable.
- The cells are not obscured but show severe cytolytic effect making assessment impossible. This effect is typically seen in smears taken in the second half of the menstrual cycle (more than two weeks after menstruation) where the cytolysis due to endogenous lactobacilli is more marked.
- The cells are too atrophic for reliable assessment. This is commonly seen in post-menopausal women.
- If a smear is sent with a formalin-fixed sample, the formalin fumes can significantly alter the cells on the slide making the smear uninterpretable.

Thus an ‘unsatisfactory’ smear can be due to either poor sampling technique or due to patient factors e.g., infection or menstruation.

What to do when a smear is reported as unsatisfactory?

Management guideline: “A woman with an unsatisfactory Pap test report should have a repeat smear in 6-12 weeks, with correction, when possible, of the problem that caused the unsatisfactory smear.”

Interestingly, some studies have shown that women with unsatisfactory smears are more likely to have a high grade lesion compared to women with a normal Pap result.

Possible interventions that may improve the likelihood of a satisfactory result when repeating the smear include:

- Scheduling the repeat sample for two weeks after the commencement of menstruation, but not any later in the cycle.
- Encourage the patient to not use any douches or sprays prior to the repeat Pap smear.
- Treat any active infection e.g., Candida, Herpes, Chlamydia, Gonorrhoea or Trichomonas.
- Prescribe local oestrogen cream in women with smears reported as atrophic.
- Avoid using any lubricant, or use only very sparingly, at the time of taking the smear.
- Consider the use of liquid-based technology (especially if there is bleeding, inflammation or abundant mucus).
- Ensure rapid fixation of the smear immediately after sampling.
- Ensure that the cytological fixative used has not expired. Also, the fixative is less effective as the container nears empty.
- Not letting the slide get near any formalin fixed samples, e.g., concurrent cervical biopsy.

Liquid-based cytology

There are currently two different systems in use for liquid based cervical cytology, namely BD SurePath™ and ThinPrep®. The two systems use different technology in the laboratory, but offer similar advantages.

The value of liquid-based cytology is the ability of the laboratory to remove blood, mucus and inflammatory cells from a sample, thus enabling easier assessment of the squamous cells. Both systems have been proven to significantly reduce the rate of unsatisfactory smears.

Currently, liquid-based cytology does not attract a Medicare rebate and the woman has a modest out-of-pocket expense for the test.
What if there are no endocervical cells seen?

The presence of endocervical cells (or metaplastic cells) indicates sampling of the cervical transformation zone which is the region at most risk of neoplasia.

Endocervical cells are more likely to be absent in smears from adolescents and women over the age of 30 (particularly post-menopausal patients).

Historically the absence of endocervical cells was thought to indicate an inadequate smear, however the evidence for this assumption is lacking. Although, some studies showed that samples lacking endocervical cells have a lower detection rate of abnormal cells, follow-up of these cases showed that there was actually no increase in missed significant disease (CIN2 or higher).

These reassuring findings have been corroborated in other studies, including in the Australian context.

The significance of the presence or absence of endocervical cells in the detection of glandular lesions is presently unknown and the data is limited, although there is no evidence contradictory to current guidance.

In conclusion, the presence or absence of endocervical cells in a smear has no correlation with the detection rates of histologically significant squamous epithelial disease. For this reason, endocervical cells are not considered when assessing for smear adequacy.

In addition, there is no evidence to justify early repeating of smears without endocervical cells. This current guidance may be reviewed in future in the light of emerging technologies, particularly HPV testing.

So what is the value of reporting endocervical cells in a smear?

Reporting the presence of endocervical cells provides a useful surrogate marker for smear-takers to gauge their technique. The QML Pathology Cytology Pap Smear Audit and monthly pap summaries allow smear-takers to monitor their endocervical pick-up rates every month. Variation in results from month to month is to be expected and should not cause alarm. Similarly, if one takes only a small number of smears one should not over interpret the monthly results. Making comparisons between a small number of smears and a much larger statewide average is statistically meaningless. In these circumstances, it would be more meaningful to look at the total annual results.

After excluding a statistical aberration due to small sample size, and excluding other factors (for example an older patient population), if a smear-taker persistently gets well below average figures it may indicate a sub-optimal technique.

References


Pathologist Profile

Dr Jason Stone MBChB FRCPath FRCPA
CONSULTANT HISTOPATHOLOGIST & CYTOPATHOLOGIST

After graduating with a Bachelor of Medicine and Bachelor of Surgery in 1997 from the University of Cape Town, South Africa, where he received multiple academic prizes, Dr Jason Stone continued his internship and Orthopaedics SHO at Greys Hospital Pietermaritzburg, South Africa.

In 2000, Dr Stone went to the UK and worked in the Department of Physiology and Histology at Bristol University. He commenced his histopathology training in Sheffield where he handled a wide range of general surgical specimens, including non-gynaecological cytopaths.

Dr Stone joined Doncaster and Bassetlaw Hospital as a Consulting Pathologist in 2006, and in 2010 moved to Australia and joined the QML Pathology Brisbane histology and cytology team.

In addition to his work at the Brisbane Laboratory, Dr Stone also oversees histology and cytology for the Mackay region.

Phone: (07) 3121 4426
Email: DrJason.Stone@qml.com.au

Congratulations Dr Stone, on receiving dual fellowship for both the Royal Colleges of Pathology in the UK and Australasia.
The prognosis for the ovarian cancer patient is usually poor. This is due, in large part, to the fact that the majority of the patients with ovarian cancer are diagnosed at an advanced stage with five-year survival rates reported to be less than 30%, while early stages of the disease are potentially curable.

As early detection is vital in ovarian cancer patients, there has been intense interest in evaluating ways of early detection through the use of biomarkers, imaging techniques or a combination of these modalities.

**Role of Biomarkers in Ovarian Cancer**

Measurement of serum CA125 level is the most widely studied method of screening for ovarian cancer. Serum CA125 values are elevated in approximately 50% of women with early stage disease and in over 80% of women with advanced ovarian cancer. However, CA125 level can be elevated in numerous other benign and malignant conditions including endometriosis, pelvic inflammatory disease and cancers of the endometrium, breast, lung, and pancreas etc. Due to the lack of sensitivity and specificity of CA125 in the early detection of ovarian cancer, a variety of other biomarkers have been investigated.

Recently HE4 (Human Epididymal Protein 4) has been proposed as a useful biomarker for monitoring recurrence and disease progression in patients with epithelial ovarian cancer. HE4 is a precursor of the protein human epididymis protein, encoded by a gene located in chromosome 20q12-13.1. HE4 is frequently over expressed in ovarian cancers with only minimal expression in normal ovarian tissue. Some expression has also been found in pulmonary, endometrial and breast adenocarcinomas, and mesotheliomas.

Although HE4 shows a better specificity than CA125 in benign conditions as well as in the differential diagnosis of ovarian cancer from other malignant diseases, it is not specific for ovarian cancer. Elevated HE4 levels can also be found in patients with endometrial cancer, non-small cell lung cancer and renal failure.

**Biomarker Panels as Screening Tools for Detection of Ovarian Disease**

Many promising tumour markers have been evaluated in patients with ovarian cancer. Some of the markers have been evaluated in combination with one another to improve the sensitivity, specificity, and the positive predictive value of the test.
One of the newest biomarker panels for ovarian cancer is the ROMA (Risk of Ovarian Malignancy Algorithm). The key purpose of this test is to estimate the probability of ovarian cancer in women with a pelvic mass. Serum CA125 and HE4 levels are measured in the serum and combined with their menopausal status to yield a ROMA value. Patients with a pelvic mass can then be categorised into low and high risk groups for epithelial ovarian cancer and then effectively referred to the appropriate surgeons for their care. There are no large clinical trials to date to evaluate the routine use of ROMA in a population screening setting.

Ovarian Cancer Screening in Australia

At present, most professional societies in Australia do not recommend routine screening of the general population for ovarian cancer as there is currently no evidence that any test, including pelvic examination, CA125 or other biomarkers, ultrasound, or combination of tests, results in reduced mortality from ovarian cancer.

References

- Anderiesz C, Quinn MA. Screening for ovarian cancer. MJA 2003;178:655-656.

Approximately 5 to 10% of ovarian cancers are thought to be hereditary. Three gene mutations are known to be associated with an increased risk of ovarian cancer, BRCA1, BRCA2 and hereditary nonpolyposis colorectal cancer (HNPCC). Although there is no level of evidence that this group of women should undergo screening, the current recommendations is 6 to 12 monthly CA125 and transvaginal ultrasound.

Testing at QML Pathology

To order, please request ‘CA125’ and ‘HE4’ (OR ROMA) in the tests requested section of your request form.

HE4 is a non refundable test which attracts an out of pocket cost of $40.00+. For further information, please contact Dr Julia Chang, Dr Charles Appleton or Dr Kerry DeVoss on (07) 3121 4420.

*Fees are correct at time of printing and may be subject to change.

Dr Julia Chang MBBS (Hons), BSc (MED.) (Hons) FRCPA
CONSULTANT CHEMICAL PATHOLOGIST

Dr Chang graduated in 1997 with a Bachelor of Medical Science (honours) before completing her MBBS (Honours) in 2000 at the University of Sydney. In 2001 Dr Chang began an internship with the Concord Repatriation General Hospital before working as a Junior House Officer at the Royal Brisbane Hospital in 2002.

Dr Chang trained in chemical pathology at the Princess Alexandra Hospital, at the QHPS Central Laboratory at the Royal Brisbane Hospital, and in 2007 in the Biochemistry Department of QML Pathology. In 2008 Dr Chang completed her fellowship and joined QML Pathology as a Consultant Chemical Pathologist.

Phone: (07) 3121 4444
Email: Julia.Chang@qml.com.au
Dosing Over Christmas

QML Pathology wishes to advise that over the upcoming Christmas period, the QML Pathology Warfarin Care Clinic will be closed. Please note that NO NEW REGISTRATIONS will be taken from 2.00pm on Friday, 14 December 2012, with the registration line re-opening at 7.00am on Wednesday, 2 January 2013.

During this period, it is essential that any new patients on Warfarin are supplied with instructions and/or referred to their local doctor for supervision. Patients who are currently monitored by QML Pathology and are being discharged from hospital will be accepted over this period.

Doctor’s Supply Requisition Form

QML Pathology has updated the Doctors Supply Requisition Form. To obtain a copy please phone Doctor Stores on (07) 3121 4508 or order online at www.qml.com.au.

Fat Reducing Substances

Due to discontinuation of the manufacture of faecal reducing substance kits, we regret that this test is no longer routinely available. This test will only be performed on children under 3 years of age.

QML Pathology Audits

Doctors who are participating in the QML Pathology Cytology Pap smear Audit and/or Surgical Skin Audit, please remember to contact your Medical Liaison Officer or local branch if you change practice address so you can continue to receive your points for submitted samples.

Vitamin D Deficiency

WHY TEST?

Several diseases and health problems are related to a poor supply of vitamin D.

A simple, bulk billed blood test will confirm your patient’s vitamin D levels. The Expert Working Group of the Australian and New Zealand Bone and Mineral Society, Endocrine Society of Australia and Osteoporosis Australia define vitamin D deficiency as a 25-hydroxy vitamin D level of less than 50 nmol/L, therefore, a 25-hydroxy vitamin D level between 50-75 nmol/L indicates that a functional vitamin D deficiency may be present.

- Vitamin D maintains calcium and phosphate homeostasis, and optimises bone health and muscle function.
- Diseases associated with low levels of circulating serum 25-OHD include autoimmune diseases, cardiovascular and metabolic diseases.

WHO SHOULD BE TESTED?

Those most at risk and who should be tested for a vitamin D deficiency include:

- Individuals with naturally dark skin
- Individuals who cover their skin for religious or cultural reasons
- Individuals who are housebound or in institutional care
- Ante natal pregnant women as a base line
- Babies and infants of vitamin D deficient mothers, especially if breastfed
- Individuals with osteoporosis
- Individuals with malabsorptive syndromes or who are obese.

HOW TO ORDER

Simply request ‘Vit D’ on a QML Pathology request form. Medicare rebates apply (subject to Medicare guidelines and criteria).


For further information please contact your Medical Liaison Officer, or the QML Pathology Marketing Department on (07) 3121 4506.
Prostate Health Index *(phi)*

**WHY TEST?**

*Superior Diagnostic Accuracy*

A simple blood test is now available giving improved accuracy for the diagnosis of Prostate Cancer.

*Phi* testing essentially combines 3 blood tests, total Psa, free Psa and p2Psa, into one index that estimates a male patient’s probability of having prostate cancer.

This advance will allow clinicians and patients to make more informed decisions regarding prostate assessment than has been previously possible.

**WHO SHOULD BE TESTED?**

The use of phi is particularly useful in men where PSA is mildly elevated (2-10ug/L). Studies have shown that the phi is a better predictor of prostate cancer risk than PSA and % free PSA in men 50yrs old and over.

This new index information will assist clinicians to better determine if a raised PSA level in a patient could be due to prostate cancer, benign disease or other factors. QML Pathology report phi as a single value.

**TABLE 1: PROSTATE HEALTH INDEX RANGES**

<table>
<thead>
<tr>
<th>Beckman Coulter phi Range</th>
<th>Prostate Cancer Risk Category</th>
<th>Probability of Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 22.9</td>
<td>Low</td>
<td>8.4%</td>
</tr>
<tr>
<td>23 - 44.9</td>
<td>Moderate</td>
<td>21.0%</td>
</tr>
<tr>
<td>45+</td>
<td>Significant</td>
<td>44.0%</td>
</tr>
</tbody>
</table>

Ranges apply to men 50 years of age and older with PSA range of 2-10 ug/L.

**HOW TO ORDER**

Simply request *PHI* in the tests requested section of your QML Pathology request form.

**COST**

Medicare does not provide a rebate for this test, therefore there will be a $90.00* out of pocket fee.

**FURTHER INFORMATION**

For further info please contact Endocrinology or Biochemistry departments on (07) 31214420.

Footnote: The molecule (p2PSA) circulates and is excreted as part of the free PSA fraction it is present as a higher proportion of the free PSA fraction in patients with prostate cancer. Improved cancer detection was discovered when p2PSA (proPSA) was combined with the free PSA and total PSA. This calculation became known as the Prostate Health Index (phi).

**References**

1. Beckman Coulter Inc 2010

* Fees are correct at time of printing and may be subject to change.
Many allergic patients have positive test results to numerous allergens and the true cause of symptoms can be difficult to identify due to an inconclusive medical history regarding the role of different allergens and reactions.

New to QML Pathology, ImmunoCAp® ISAC provides a large amount of allergen specific IgE antibody information in a single step.

**HOW CAN IMMUNOCAP® ISAC HELP?**
- Shed light on the real sensitisation profile of multi-sensitised patients.
- Reveal potential risks for severe food-related reactions.
- Identify the IgE antibody profile in patients with unsatisfactory response to treatment.
- Assess patients with idiopathic anaphylaxis.
- Define sensitisation to component allergens from 51 sources the proteins are derived from.
- Reveal unexpected sensitisations or help you rule out allergy by delivering IgE results for a broad spectrum of allergens.

**WHO SHOULD BE TESTED?**
ImmunoCAP® ISAC testing may be recommended for patients with:
- Multiple food allergies
- Atopic dermatitis
- Oral allergy syndrome
- Food allergies where component resolved diagnosis would help risk stratification, e.g., peanut allergy
- ‘Idiopathic’ anaphylaxis for diagnosis of hidden food triggers
- Reassessment of sensitisation in patients failing to improve on specific immunotherapy (desensitisation).

**FEATURES AND BENEFITS OF IMMUNOCAP® ISAC**
- Overall picture of patient’s IgE antibody profile: The results give you a highly detailed overview of primary and cross-reactive sensitisers, helping you assess the clinical risk for reactions.
- Broad molecular allergen panel: It delivers IgE antibody results for 112 allergen components from 51 allergen sources in a single patient test.
- Low sample volume: Only 30 μl of serum or plasma is needed.
- Semi-quantitative determination: Semi-quantitative results correlate with the specific IgE level by CAP determination.
- Low risk for false positive results: Low background gives blank results for non-atopic healthy controls as well as very good specificity in patients with high total IgE.

**HOW TO ORDER**
Simply request ‘ISAC’ in the tests requested section of your QML Pathology request form. The turnaround time for results is approximately 1-2 weeks. The cost of ImmunoCAP® ISAC testing at QML Pathology is $350.00*.

**FURTHER INFORMATION**
For further information, please contact Dr David Heyworth-Smith, Clinical Immunologist on (07) 2131 4444 or email david.heyworthsmith@qml.com.au.

* Fees are correct at time of printing and may be subject to change.
Collection Centre Updates

NEW COLLECTION CENTRES

BORONIA HEIGHTS ................................................................. (07) 3121 4444
90 Parklands Drive
Opening Hours:
Mon - Fri: 7.30am – 1.00pm

BRISBANE – GEORGE ST .........................................................(07) 3211 0078
336 George St
Opening Hours:
Mon - Fri: 8.30am – 12.30pm, 1.00pm – 4.30pm

BURDELL – NORTH SHORE ......................................................(07) 4774 7623
52 North Shore Boulevard
Opening Hours:
Mon - Fri: 8.00am – 12.30pm, 1.30pm – 4.30pm
Sat: 8.00am – 12.00pm

EVERTON HILLS .................................................................(07) 3354 4097
Everton Hills Family Practice, Shop G, 1 Queens Rd
Opening Hours:
Mon - Fri: 9.00am – 1.00pm

FOREST LAKE ......................................................................(07) 3413 3400
Shop 13, 200 Grand Ave
Opening Hours:
Mon - Fri: 7.30am – 11.30am, 12.00pm – 3.30pm

JACOBS WELL ....................................................................(07) 5546 1834
Jacobs Well Medical Practice
1162 Pimpama-Jacobs Well Road
Opening Hours:
Mon - Fri: 8.00am – 1.30pm

MACAY – PALMER STREET ...................................................(07) 4951 2999
Ambrose Medical Centre, 19 Palmer Street
Opening Hours:
Mon - Fri: 8.30am – 12.00pm, 1.00pm – 4.00pm

MANSFIELD ......................................................................(07) 3219 3060
Mansfield Family Practice
Shop 1/14 Aminya St
Opening Hours:
Mon - Fri: 8.00am – 1.00pm

OXLEY .............................................................................. (07) 3121 4444
Bywater Medical Centre
Suite 1-4, 169 Seventeen Mile Rocks Rd
Opening Hours:
Mon - Fri: 8.00am – 1.30pm

WELLINGTON POINT ...........................................................(07) 3211 0078
688 Old Cleveland Road East
Opening Hours:
Mon - Fri: 8.00am – 12.30pm

WOOMBYE ...................................................................... (07) 3211 0078
27 Blackall Tce
Opening Hours:
Mon - Fri: 8.00am – 12.00pm

RELOCATED COLLECTION CENTRES

TOWNSVILLE CITY ..................................................................(07) 4771 5043
The Doctors, 89 Bundock Street, Belgian Gardens
Opening Hours:
Mon - Thu: 7.30am – 12.30pm, 1.30pm – 6.00pm
Fri: 7.30am – 12.30pm, 1.30pm – 4.00pm
Sat: 8.00am – 12.00pm
The Doctor’s Noticeboard is a free service for practitioners to advise changes to their practice. If you would like to place a notice, please email details to info@qml.com.au.

**Doctor’s Noticeboard**

**DR BENJAMIN BOPP MBBS (QLD), FRANZCOG**

*Obstetrics – Gynaecology – Fertility – IVF*

Wishes to advise a change in contact details.

Phone: (07) 5539 2797
Fax: (07) 5564 9124
Email: reception@drbenbopp.com.au
Website: www.drbenbopp.com.au

Practice address remains unchanged:
First Floor, Pindara Place, 13 Carrara St, Benowa
Mail: PO Box 7016, Gold Coast Mail Centre, QLD 9726

**DR CATHARINE CURSON**, Psychiatrist, will no longer be practicing at the Toowong Specialist Centre as of 14 June 2012. New address details are as follows:

Address: The Wesley Medical Centre, Suite 11, Level One, 40 Chasely Street, Auchenflower QLD 4066.
Phone: (07) 3876 9119
Fax: (07) 3876 9121

**DR BRETT COLLINS** is a Queensland trained Orthopaedic Surgeon who focuses on knee and shoulder surgery. He has a special interest in sports related injuries.

He completed his medical degree at The University of Queensland in 1999 before joining the Orthopaedic Training Program in Queensland. He gained his Fellowship in Orthopaedics from the Royal Australasian College of Surgeons in 2009.

Subspeciality fellowship training was undertaken in Canada in 2010 - 2011. 12 months was spent at the Fowler Kennedy Sport Medicine Clinic in London, Ontario focusing solely on Sports Orthopaedics with exposure to professional and university athletes. He also completed a Lower Limb Arthroplasty Fellowship at St Michaels Hospital in Toronto, Ontario.

Dr Collins’s practice focuses on surgery of the knee and shoulder with a special interest in sports orthopaedics. This includes knee reconstruction, arthroplasty and arthroscopy, as well as shoulder arthroscopy and soft tissue surgery.

Address: Level 5, Specialist Centre
259 Wickham Tce, Brisbane, QLD 4000
Phone: 07 3834 6789
Fax: 07 3834 6637
Email: b.collins@bosmc.com.au
Web: www.bosmc.com.au

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**DR JOANNA LOFTUS**, Consultant Psychiatrist, has commenced practice at the specialist suites at Sunnybank Private Hospital on alternate Wednesdays.

Dr Loftus is a graduate of the University of Liverpool in the UK. She undertook her psychiatry training in both the UK and QLD. Since completing her training 15 years ago, Jo has worked as a Consultant at the Princess Alexandra Hospital and in the UK between 2005 - 2007. Jo is experienced in General Adult Psychiatry, with particular interests in Consultation-Liaison Psychiatry and Psychotherapy.

Please direct enquiries (referrals and appointments) to:
Address: Suite 10, 2nd Floor, Sunnybank Private Hospital
245 McCullough Street, Sunnybank, Q 4109
Phone: (07) 3344 5588
Fax: (07) 3344 1611
**DR. VERN HEAZLEWOOD**, Consultant Physician, plans to commence Private Practice at the Caboolture Private Hospital from 30th July, 2012.

Dr Heazlewood's main clinical interests are in the management of diabetes mellitus and general endocrinology, transitional care of young people with type 1 diabetes, obstetric medicine, hypertension and vascular disease. He has over 50 published articles, is a foundation member of the Australasian Menopause Society, and has membership of the Australian, American and European Diabetes Associations, Society of Obstetric Medicine of Australia and New Zealand, Australasian Diabetes in Pregnancy Society, Society of Adolescent Health and Medicine and the International Society of Hypertension.

Dr Heazlewood is a Fellow of the Royal Australasian College of Physicians and the Royal College of Physicians (London).

Appointments and/or patient referrals for admission can be made by phoning (07) 3886 9922 or mobile 0430 315 303.

**DR OLGA ELLISON**, Gastroenterologist, has recently joined Dr Lloyd Dorrington’s practice at Brockway House in Southport.

Dr Ellison obtained her Medical Degree at the University of Adelaide and underwent Gastroenterology training in Brisbane, at the Greenslopes, Mater and Princess Alexandra Hospitals.

Dr Ellison is a General Gastroenterologist and is happy to consult patients with all spectrums of gastrointestinal and liver disorders and accepts referrals for open access gastroscopy and colonoscopy. She has a particular interest in Inflammatory Bowel Diseases and Irritable Bowel Syndrome.

Dr Ellison performs endoscopic procedures at the Allamanda Private Hospital, Pindara Day Procedure Unit and Pacific Private Day Hospital.

Address: Suite 3, “Brockway House”, 82 Queen St, Southport
Phone: (07) 5591 4455
Fax: (07) 5591 4077
Email: office@dorringtons.com.au

**DR CONAGHAN AND DR BUTLER** are excited to announce that they have commenced private practice at the Mater Medical Centre.

**DR PAUL CONAGHAN** is a graduate of the University of QLD, and completed his specialist training in Queensland.

He has been working as a Staff Specialist in Townsville over the last 5 years and has now moved to Brisbane to be closer to family. He has developed a particular interest in complex obstetrics after working in tertiary hospitals for the majority of the last decade, but his practice covers all aspects of general obstetrics and gynaecology including laparoscopic and pelvic floor surgery.

With strong commitment to education and training, he examines regularly for the college and is heavily involved in registrar teaching.

**DR ROB BUTLER** completed his MBBS and FRANZCOG specialist training in Queensland, working for over 7 years in tertiary facilities and developing his interest in the management of complex medical conditions in pregnancy, and high risk pregnancies.

He also spent 2 years dedicated to tertiary endoscopic and laparoscopic surgery and has a special interest in the minimally invasive management of many gynaecological conditions. He has a keen interest in education and research and is currently a Senior Lecturer and examiner at the University of Queensland.

Address: Mater Medical Centre, Suite 41, Level 7
293 Vulture Street, South Brisbane
Phone: (07) 3163 1688
### Infectious Diseases Report

#### GEOGRAPHIC DISTRIBUTION - JULY 2012

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<td>Rhinovirus (all types)</td>
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<td>Treponema pallidum</td>
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<td>Trichomonas vaginalis</td>
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<td>Varicella Zoster virus</td>
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<td>TOTAL</td>
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**REGIONS:**

1. Cairns
2. Gold Coast/Northern Rivers
3. Ipswich
4. Mackay
5. Mount Isa
6. New England
7. North Brisbane Suburbs
8. Northern Territory
9. Redcliffe
10. Rockhampton
11. South Brisbane Suburbs
12. Sunshine Coast
13. Toowoomba
14. Townsville
15. Wide Bay/Burnett

FURTHER HISTORICAL CLINICAL DATA CAN BE OBTAINED BY CONTACTING YOUR LOCAL MEDICAL LIAISON OFFICER.