From the Director’s desk

The Communicable Disease Control Directorate (CDCD) continues to monitor the re-emergence of traditional diseases in some key subgroups of the population. This edition of the Bulletin contains information about neonatal listeria after 2 recent cases, infectious syphilis after 100 notifications already this year (compared to 98 for all of 2007 and 49 for all of 2006) and lymphogranuloma venereum after 8 recent cases. Prevention programs are being rekindled to address these issues. The paediatric influenza vaccination campaign has seen about half the eligible children of Perth vaccinated and minimal influenza transmission in the community. Children requiring second doses should still have them in case a late influenza wave arrives.

The need for intending parents to have booster pertussis vaccines before, after or (if exposed) during pregnancy, will be the subject of a campaign after several notifications of pertussis in children under 1 year of age, most requiring hospitalisation, have been associated with transmission from parents.

More detail in the next Disease WAtch.

Paul Van Buynder, August 2008

Everything Old is New Again: Syphilis and Lymphogranuloma Venereum (LGV) on the Rise in Perth

The syphilis outbreak in men who have sex with men in the Perth metropolitan area, which started in 2006 (see Figure below), is continuing and is now complicated by the occurrence of co-infection with lymphogranuloma venereum (LGV) and spread to bisexual men.

The first wave of the outbreak in late 2006 involved men who have sex with men, many of whom were HIV-positive and ‘sero-sorting’ to have informed, unprotected sex with HIV positive partners. By the second wave in mid 2007, the outbreak had spread to include HIV negative men who have sex with men. The third wave of the outbreak which started early this year is of great concern because transmission to bisexual men has occurred, with serious implications for women and pregnant women in particular.

The Department of Health has just been notified of 8 cases of rectal LGV, mainly in HIV-positive men with infectious syphilis. LGV is caused by immunotypes L-1, L-2 and L-3 of *Chlamydia trachomatis* — these are related to but quite distinct from the types that cause genital chlamydia infections or trachoma. Some of the LGV cases presented with symptoms related to proctitis, including rectal irritation, bleeding and/or discharge, which may be easily misdiagnosed as haemorrhoids or inflammatory bowel disease. Others had no symptoms and were diagnosed via contact tracing. LGV can result in widespread scarring and deformity in the affected area, such as anal stricture. LGV may also spread systemically to infect the brain and liver.

![Number and 3 month moving average of infectious syphilis notifications among MSM in the metropolitan region, WA, January 2005 to May 2008](image-url)
If a male patient who has sex with men presents to you with symptoms suggestive of LGV, please seek advice from a sexual health physician at Fremantle (9431 3333) or Royal Perth (9224 2244) Hospitals.

All health professionals involved in antenatal care are reminded that many female partners of bisexual men are unaware that their partner has male sexual partners. This highlights the importance of the RANZCOG’s recommendation to offer syphilis and HIV testing at the first antenatal visit to all antenates. A repeat syphilis test should be offered at 28 – 36 weeks to women who are believed to be at high risk of acquiring syphilis, who have put themselves at risk of infection since their first test, or who had positive syphilis serology in the first trimester.¹

Doctors are reminded that the treatment for infectious syphilis is BENZATHINE (not benzyl) penicillin 1.8g IMI stat. Recommended treatment for LGV is doxycycline 100mg bd for 3 weeks.

Please report all confirmed syphilis and LGV cases to the Communicable Disease Control Directorate by faxing a disease notification form to 9388 4848. Further information is available on the Department of Health’s LGV webpage: www.public.health.wa.gov.au/3/793/3/lymphogranuloma.pm

Infectious Syphilis: Practice Points for clinicians

Diagnosis of Syphilis
- Always include syphilis screening as part of routine antenatal testing and if clinically or epidemiologically indicated when screening for STIs. Don’t make assumptions.
- Testing is easy
- Just ask for syphilis serology and the laboratory will automatically go through an algorithm and make the appropriate recommendations.
- If you are unsure about interpreting syphilis serology, speak to the microbiologist at the lab or a sexual health or infectious diseases physician; or check the DoH Guidelines.²
- Syphilis is a great imitator
- Include syphilis in your differential of a maculopapular rash. Rash is the commonest presenting feature of infectious syphilis. It is usually over the whole body and palms and soles may be affected. It is similar to the rash of infectious mononucleosis, pityriasis rosea and seroconversion with HIV.
- Other clinical presentations include; flu-like illness, alopecia (scalp, eyebrows and body hair), anogenital chancres (typically painless ulcers) and condylomata lata which look very similar to genital warts. The serology that you order as part of a full screen in those with warts will mean the diagnosis is not missed.

Treatment of infectious syphilis is simple (but sometimes difficult to arrange)
- Standard therapy is with a single dose of BENZATHINE penicillin 1.8g IMI. This is very different from benzyl penicillin (Pen G) that is found in doctors’ bags.
- Benzathine penicillin is long acting (at least a week) and therefore a single dose is adequate for infectious syphilis. Benzyl penicillin only lasts for about 4 hours.
- If you have difficulty accessing BENZATHINE penicillin, call the sexual health clinic at Fremantle (9431 3333) or Royal Perth (9224 2244) Hospitals. If alternative therapies are needed discuss first as compliance is a major issue.

Follow-up and contact tracing are vital
- To be able to monitor response to treatment it is important that the serology is repeated on the day of treatment.
- Patients always need follow-up serology at 3 and 6 months after treatment to ensure adequate response to therapy.
- As secondary syphilis may take up to 6 months to manifest, thought needs to be given as to which of the patient’s sexual partners should be found and tested. Assistance is available from Public Health Units. (see www.public.health.wa.gov.au/3/280/3/contact_details.pm for your nearest Public Health Unit’s contact details)

HIV co-infection
- HIV can accelerate the course of infectious syphilis so it is important to know the HIV status of your patient.

References:
Tuberculosis Control in Western Australia

It is a common misconception that tuberculosis (TB) is “coming back”. This implies that TB incidence is increasing after a time when it wasn’t a problem. In fact, during the 60 years that effective chemotherapy has been available, the incidence of TB has increased and continues to rise on a per capita basis worldwide.

In the 1980’s, in the US, committees were formed for the elimination of TB (technically < 1 new case/ 1 million population per year), but by 1993 TB was declared a Global Emergency by the WHO. This was principally because of a substantial rise in TB rates in the USA. Eradication of TB, even in low prevalence settings like the US and Australia, is now considered not feasible in the short-term.

In Australia TB control has been highly successful - there was no rise in the TB incidence rate, as seen in the US. Rather, the rate in Australia fell until about 1985 and since then has been at a steady state of about 5 cases /100,000 per year, one of the lowest rates in the world. However, if rates are subdivided according to a person’s origin (see figure), rates in Australian-born people have continued to fall. In non-Indigenous Australian-born people the rates approach elimination. In Aboriginal people, they are still several-fold higher than non-Indigenous Australian-born people, but are also falling. By contrast, most cases (86%) are in people born overseas and the rate in this group is increasing.

These and other data indicate there is very little transmission of TB within Australian borders, again showing that the TB Control Program is effective. However, our overall rates remain steady, rather than falling, because of an increase in both the total and proportion of migration from countries with high TB incidence. Greater than 99% of these people enter Australia with dormant TB that is difficult to detect. They are well, with a normal chest x-ray and only reactivate their TB after arrival.

The TB Control Program in Western Australia is based at the Perth Chest Clinic and healthcare professionals are sometimes surprised to hear that it still exists. Just like TB, the clinic in fact never went away. Indeed this dedicated program, which provides an open access, one-stop service (medical consultation, nurse case management, TB medication, chest x-ray and blood tests), is undergoing a significant regeneration. After a formal external review by a leader in tuberculosis control from South Australia (Dr Ral Antic) in 2006, substantial work is being done towards improving personnel, services and infrastructure.

In short there are two key messages:

(1) **Think TB:** In migrants, particularly if recently arrived from Asia or Africa or, Aboriginal people, with a cough for more than three weeks or unexplained fever, test for TB.

(2) **Use the TB Service:** The doctors and nurses at the Perth Chest Clinic are available to assist you in the diagnosis and management of TB. Please contact us:

**Telephone:** 9219-3222 or email:

- Justin Waring (Medical Director)
  justin.waring@health.wa.gov.au
- Gail Larsen-Skinner (Senior Registered Nurse)
  gail.larsenskinner@health.wa.gov.au

Trends in tuberculosis notification rate in Australia
Listeriosis in Neonates

The Communicable Disease Control Directorate (CDCD) has been notified of 2 recent cases of neonatal listeriosis. The cases were unrelated to each other and had different organism profiles.

Two unrelated non-neonatal cases of listeria have also been notified since June, for a total of seven cases in 2008.

Listeriosis manifests most commonly as septicaemia and/or meningo-encephalitis in newborn infants and vulnerable adults; or as a febrile illness with abortion in pregnant women. Infection may result from eating food contaminated with the bacterium *Listeria monocytogenes*. These bacteria are sometimes found in foods that have not been properly prepared or stored, and particularly in certain ‘high risk’ foods. Whilst most healthy people can eat these foods without becoming ill, in vulnerable groups these infections can cause severe disease.

People at increased risk of listeriosis include new-borns and elderly individuals and adults with immunocompromising illness, including cancer, renal failure, HIV/AIDS and organ transplantation. Listeria infection in pregnant women can have serious consequences, including miscarriage, stillbirth or premature birth. Mothers generally have mild febrile illnesses or may even remain asymptomatic.

Notification data in Western Australia shows that infection is now more common amongst immunocompromised adults than pregnant women and newborns.

Nosocomial infection is not uncommon in persons with chronic illness and hence hospitals must also be diligent in ensuring appropriate food is served to at-risk patients.

Unfortunately, listeriosis is preventable and the risk can be reduced by following a few simple recommendations. In addition to ensuring that foods are prepared and stored safely, persons in any of the vulnerable groups mentioned above should avoid high-risk foods.

These include:

- soft cheeses (e.g. Brie, Camembert, fetta and ricotta)
- paté
- cooked diced chicken (e.g. as used in chicken sandwiches)
- manufactured meat products (e.g. polony and ham)
- self service or prepacked salads (e.g. coleslaw)
- Cold, smoked and raw seafood (e.g. smoked salmon, oysters and sashimi)
- soft serve ice cream and thick shakes

Nonetheless, it is important to remember that listeriosis is rare and the risk of developing it even after eating a high-risk food is very low. These recent cases, however, serve as a timely reminder that information about the risks of listeria and the foods to avoid in pregnancy is an important component of routine antenatal care.

The Department of Health’s pamphlet titled ‘Listeria Infection’ is widely available and provides information on minimising the risk of listeriosis for pregnant women and the immunocompromised.

This pamphlet (code number 9672) is available from www.public.health.wa.gov.au/2/402/2/listeria_infect.pm or by contacting HealthInfo on 1300 135 030.

A poster indicating ‘high-risk’ risk foods specifically targeted to pregnant women is also available and can be obtained by contacting Environmental Health on 08 9388 4999.